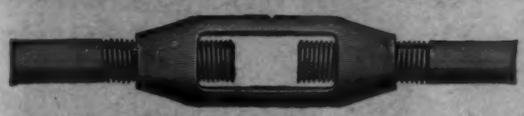
The American Artisan
And Hardware Record

Vol. 56. No. 23. CHICAGO, DECEMBER 5, 1908. $2.00 Per Year.

TURN BUCKLES



A full line of Bolts, Bolt Ends, Rivets, Lag Screws, Nuts, Washers and Carriage Hardware.

COLUMBUS BOLT WORKS, COLUMBUS, OHIO.

GET THE LIVE LINE

"AMERICAN SEAL"

Elastic Oil Roofing Cement, Stove Putty and Asbestos Furnace Cement

For Furnaces, Stoves, Ranges and Roofs.

Jobbers write to-day for prices

THE

Wm. Connors Paint Mfg. Co.

Makers. TROY, N. Y.

Western Agents: Friedley-Voshardt Co., 194 Mather St., Chicago, Ill.

Southwestern Agents: Stockhoff Supply Co., 107 N. Main St., St. Louis, Mo.

The **LARGEST** *Exclusive* **WHOLESALE** *Net Price Catalogue House in the World of*

Cutlery, Hardware and House Furnishing Goods

Large Catalogue Will Be Sent on Request to Merchants Only.

CHAS. WEILAND

147-149 Chambers Street, 129-131 Reade Street, New York City

Cutlery and Mechanics' Tools my Specialty.

MATCHLESS

Spring and Pivot Hinges

Floor Hinges, Jamb Hinges and Hardware Specialties.

The fact that Matchless Spring Hinges have been on the market since 1895 and that in that time not one set has required repairs from fault of hinge speaks very well for their serviceability and wearing qualities.

If your Jobber cannot furnish them write us.

LAWSON MFG. CO.
40 Dearborn St., Chicago, Ill.

WIZARD

ADJUSTABLE HINGE HANGER

Made of best quality Malleable Iron. The two sets of Steel Roller Bearings reduce friction and make an exceptionally easy running hanger. Lateral and Vertical adjustment. No special track required. *Ask your jobber or write us.*

SAFETY DOOR HANGER CO.
Manufacturers
Ashland, O., Hamilton, Ont., Can.

"NEVER-BREAK"

TRADE MARK

Catalog Free

"NEVER-BREAK"

STEEL SPIDERS, GRIDDLES AND KETTLES

WILL NOT Scale Off like cheap enamel.

WILL NOT Scorch or Burn like light fry pans and skillets.

WILL NOT Absorb Grease or Flavors like cast Iron.

THE AVERY STAMPING CO.
CLEVELAND, OHIO
Sole Manufacturers
"NEVER-BREAK" Goods.

The Highest Grade File Made.

DELTA

TRADE MARK DELTA

DELTA FILE WORKS
CARVER FILE CO.
PHILADELPHIA, PA.
An independent organization not connected with the trust in any form, shape or manner.

FILES OF QUALITY

FILES

The File You Will Eventually Use.

PULLMAN SASH BALANCES

Are you selling them?

IN USE EVERYWHERE

Send us your orders

PULLMAN MFG. COMPANY
SOPHIA STREET
ROCHESTER, N. Y., U. S. A

100

Tinners' Patterns

Complete for

$1.00

Sent Postpaid on Receipt of Price

Daniel Stern

355 Dearborn Street - Chicago

"They Keep the Frost off the Windows"

During the Holiday Vacation

many old school house stoves will be replaced with new ones.

School Authorities

are constantly on the "look-out" for a Ventilating Stove that makes an even distribution of heat to every part of the room—for these things promote comfort, health and economy of fuel.

They would all buy the

Shively Pure-Air Stove

If they knew about it.
They are **not** high priced.
They burn any kind of coal and wood.
They furnish a constant flowing stream of pure fresh air warmed to the proper temperature.
Tell your School People about them.

Stove & Range Co. of Pittsburgh

"Good Values in Stoves." PITTSBURGH, PA.

The 10th in a Series of Reasons Why the KELSEY is the Best Warm Air System

IN SCHOOLS and CHURCHES

The proper heating and ventilating of modern churches and school buildings is a branch of the heating business that is receiving much more attention than formerly.

The business secured for the Kelsey Battery System with fan and motor for buildings of this character has increased 100 per cent this year.

This is due to results secured in previous years, and for the reason that **no other heater is so well adapted for heating large volumes of air under fan pressure**

The Kelsey System with fan, motor, air washer and temperature control for large, fine residences, is the **ideal method,** and the time is not far distant when this method will be recognized as superior to any other system.

We maintain a competent Engineering Staff for laying out and installing the Kelsey System in large buildings, and the practical assistance of this department is at the disposal of Kelsey Agents.

WHY NOT SECURE THE KELSEY AGENCY
And Get in Line for the Business that is Sure to Come

KELSEY HEATING COMPANY, Syracuse, N. Y.

NEW YORK: 156 Fifth Avenue
CHICAGO: Van Evera & Lewis Mfg. Co., 104-106 W. Lake Street
James Smart Mfg. Co., BROCKVILLE, ONT., Sole Makers for Canada

FOSTER'S OPAL

A New Addition To Our Line

which we guarantee to be the equal of any Range (and superior to many) in construction and baking qualities.

A SURE SELLER

Just the kind of Range for which there is a demand and just the one YOU want to handle—a Range that sells at a Reasonable Price and which can be heartily recommended.

FEATURES—Six Holes on Top and the covers and centers are extra heavy. Large, Roomy Fire-Box with no dead corners to collect ashes. Duplex Grate. Reservoir made of cast iron with porcelain lining. Balanced oven door so constructed that a new spring can be put on in one minute without taking the range apart or putting the hand on inside.

Our line of Stoves and Ranges merit your investigation! They are ALL Trade Winners. **Write Today!**

THE FOSTER STOVE COMPANY, Ironton, Ohio

VAN'S

Patent Improved Wrought Steel Portable

RANGE

For Hotels, Restaurants, Public Institutions, Boarding Houses and Private Families. All kinds of Hotel Implements for culinary purposes. Manufactured and for sale by

The
JOHN VAN RANGE CO.
Southwest Corner
5th and Broadway
CINCINNATI - - OHIO

CHAMPION INTERCHANGEABLE RANGE

This is an INTERCHANGEABLE RANGE, not a combination range, nor a coal and gas range bolted together. It is something new.

You Can Change It from One Fuel to Another Instantly

This Range is bound to prove a big seller, it has so many superior features. For instance, if gas is being burned and it gives out or gets weak, in ten seconds, it can be changed to coal and the cooking can go on without interruption. **That's a Big Selling Point** which will appeal to every user of Ranges. There are others too, and they are going to create a big demand for this Range. Are you going to be able to meet the demand in your vicinity?

Better secure the agency at once. Write today.

We would be pleased to send you catalog and prices.

CHAMPION STEEL RANGE CO.
3950 W. 25th St., CLEVELAND, O.

Is the Bulk of the Range Business in Your Vicinity Coming Your Way?

No. 3318
Weight
390 lbs.
Price Net
$19.95
Full Nickel
Trimmings

IF NOT IT IS BECAUSE YOUR COMPETITOR IS OFFERING A BETTER RANGE THAN YOU ARE

Range users demand ranges in which their interests are carefully taken care of and when they can purchase that kind they do so.

That is why sales do not get away from dealers handling

LANDAY MATCHLESS STEEL RANGES

Once a prospective purchaser sees a **Landay** Range and notes its desirable features the sale is clinched.

But what are these desirable features?

Well first of all—the materials used are the best procurable, then, it is modern in every respect, it is an economical fuel consumer; its working qualities are absolutely perfect, every fault so common to ordinary range construction has been eliminated, and last but not least—**A Guarantee Bond, guaranteeing the fire linings for three years goes with every range.** **LANDAY** Ranges are the only ones that will secure the cream of the range business in your town and you should secure the Agency.

CHOICE TERRITORY OPEN FOR HUSTLING SALESMEN

Landay Steel Range Co., 2621 N. 15th St., St. Louis, Mo.

BANNER QUALITY

This is a range of unquestioned merit and individuality.

It is handsomely designed, made of the best materials, free from defects of any nature and carefully and honestly constructed—in fact a first-class range in all respects.

It will sell because it is just what your customers want, a range that can be depended upon at all times, a range that sel s at a price which is right and a range that cooks and bakes to perfection.

Mr. Dealer—You should handle it, there's money in it for you. Write for further particulars.

Quality Stove & Range Co., Belleville, Ill.

SPLENDID IRVING

A "HIGH GRADE" RANGE at a MEDIUM PRICE

The Splendid Irving is one of our newest productions, built in the usual superior manner characteristic of our manufacture, finely finished and perfect in every way.

ALL NICKEL PARTS LIFT OFF

Write for our Catalog. Just out!

The FLOYD-WELLS CO., ROYERSFORD, PA 85 Kinzie St., CHICAGO, ILL.

Munsell's Mica

EUGENE MUNSELL & CO.
NEW YORK AND CHICAGO

THE STANDARD FOR HIGH GRADE STOVES

The MONITOR RADIATOR

BASE BURNER WITH FIVE FRONT FLUES

has *1683 Square Inches* more Radiating surface than any other Base Burner made.

THE BIGGEST SELLER ON THE MARKET

You should secure the Agency at once. *Write today to*

PAXTON & GALLAGHER CO., Omaha, Neb.

Exclusive Distributors for the West

THE CHAMPION

Hot Water Combination Boilers

THEY FIT ANY FURNACE

They fit close into the dome and have an open front at fire door. In small heaters base section can be used alone. One or more rings may be added for additional capacity to be determined by the amount of hot water radiation to be used. All joints absolutely tight.

WRITE FOR CATALOGUE.

FRANK D. STOLZ, Manufacturer
156 Webster Ave., CHICAGO, ILL.

The FUEL$AVER

Will Add $75 to $750 to Your Profits

¶ It's a new automatic heat regulator for furnaces. Keeps the temperature uniform. Reduces the coal bill 25%. Low in price and pays a big profit.

¶ Write for particulars to-day.

F. D. KEES MFG. CO., - **Beatrice, Neb.**

SAVE HALF YOUR FUEL

BY USING THE

ROCHESTER RADIATOR

Satisfaction guaranteed, or money refunded Over 100,000 of them in use. Fits any stove or furnace.

We make the original and genuine Rochester Radiator.
We do not sell to Catalog Houses.

Price, from **$2.00** to **$12.00**

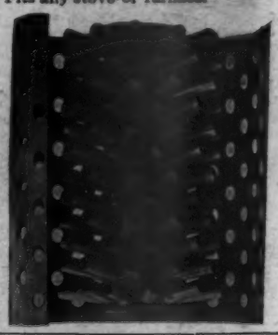
FOR HARD OR SOFT COAL, WOOD OR GAS.

We refer all inquiries to you from your town when you carry a stock of our Radiators.

We guarantee our Radiators not to interfere with or choke the draught.

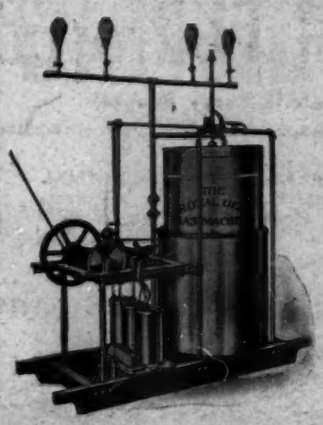
They are easily cleaned.

Write for descriptive Catalog and Prices.



ROCHESTER RADIATOR CO., 125 Furnace St. ROCHESTER, N. Y.

Boston, Mass., S. M. Howes Co.; Detroit, Mich., Standart Bros., Ltd.; St. Paul, Minn., Farwell, Ozmun, Kirk & Co.; Omaha, Neb., Wright & Wilhelmy Co.; Sioux City, Ia., Knapp & Spencer Co.; Kansas City, Mo., The Harbison & Modica Mfg. Co.; Kingston, N. Y., Canfield Supply Co.; Portland, Ore., P. W. Isherwood, Esq.; Hamilton Ont., The D. Moore Co.



The "Royal Gem Gas Machine"

A Machine Which Embodies Every Requirement of a Good Gasoline Gas Generator.

It produces a nice even quality of gas, regardless of the number of lights burning. Easily controlled by adjusting the stroke of the gasoline injector.

The "Royal Gem Gas Machine" will produce **any desired pressure.** The most economical gas-producing machine made. Simple, safe, durable. Does not require a special burner or mantle. Has no complicated mixer to adjust. Nothing to get out of order.

Sent on 30 Days Trial to Responsible Parties

Send for Circular and Prices

J. E. Whitacre Manufacturing Company

No. 1426 Rock Street, ROCKFORD, ILLINOIS

BOYNTON'S

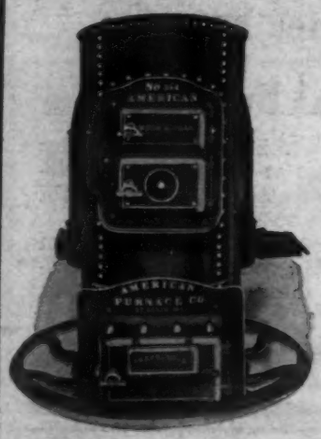
Square Pot Crusader Furnace

One of the many different styles of Square Pot Furnaces with genuine talking and selling points now being manufactured and sold to the trade.

SEND FOR OUR COMPLETE CATALOGUE.

THE BOYNTON FURNACE CO.

147-149 Lake St., CHICAGO. 207-209 Water St., NEW YORK.



Both the Dealer's and the User's Interests

Have been considered in the construction of

American Furnaces

We have made a furnace that every dealer in every community can sell and guarantee. A furnace that is built upon Hygienic and Modern Principles and bound to satisfy the user in every particular.

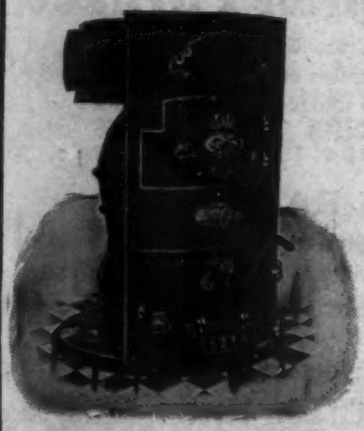
Clean and Tight Like a Boiler

—our new method of riveting makes it so.

DEALERS: A Sample Furnace will be shipped to any responsible dealer in the United States and if after careful examination (we allow you 30 days) it does not prove entirely satisfactory, it can be returned at our expense.

WRITE FOR OUR CATALOG TODAY.

The American Furnace Co., 1911-15 Pine Street St. Louis, Mo.



OUR NEW DE HAVEN ALL CAST FURNACE

Strictly Modern and Up-to-Date in Every Respect

All the latest features in modern furnace construction are embodied in the make-up of this furnace.

FEATURES: Extra Heavy; Gas Tight; Burns all grades of Hard Coal, Soft Coal and Wood; Simple and Economical to Operate; Top Return Flue Radiator; Large Radiating Surface; Roller Bar Grate.

Write to-day for Catalog and Prices.

Youngstown Furnace & Supply Company

NILES, OHIO

Manufacturers of the Celebrated LION-APEX and BESSEMER Series of Furnaces.

Chicago Branch
218 East Lake Street

ROOD & McINTYRE
Kansas City, Mo., Southwestern Distributors

YOU MAY CLAIM YOU CANNOT SELL GOODS OF QUALITY—WE SAY YOU CAN

IT can be done by explaining to your customer why the article costs more than one of inferior make—show him where he is getting his money's worth for the higher price he pays.

Apply this rule to your heating business by selling MUELLER Furnaces—explain that they are worth more than others because they are guaranteed to contain more direct heating surface than any other heater made, which means economy and power.

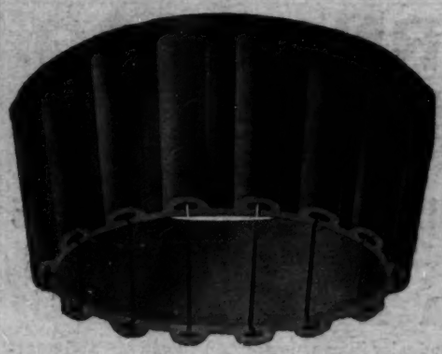
They are fuel savers—saving fuel saves money.

Durability is one of the MUELLER strong points—many MUELLER Furnaces having been in constant use for over 25 years, without repair and still giving good satisfaction.

L. J. MUELLER FURNACE COMPANY

Established 1857 — 191 Reed Street, Milwaukee, Wis.

WHY BURN MONEY WHICH CAN BE SAVED?



Why not give your customer a furnace which is provided with a smoke consuming fire-pot which will burn the smoke, and thus save the money? **Fuel raised to a red heat without a mixture of air enough to produce combustion disengages its carbon in fine powder forming smoke,** and this smoke passes up the chimney.

Green's Base Heater Furnace
and
Green's Colonial Furnace

are provided with slotted fire-pots, which provide a means by which air may be let in upon the fire at all points of its circumference from beneath to the end of the perfection of the combustion no matter what character of fuel may be used.

Your customers will be glad to pay $25.00 to $35.00 more for a furnace which will save them money every year in coal bills. The furnace will cost you no more than any good furnace, your customers will be pleased, and you will be able to build up a large furnace business.

Write for our new catalogue and discounts.

GREEN FOUNDRY & FURNACE WORKS, Dept. "A:" Des Moines Iowa,

Lincoln Stove Repair Co., Lincoln, Neb., State Managers for Nebraska. Rowe Heating & Construction Co., Watertown, S. D., State Managers for South Dakota

Floral City Capitol Furnace

Like all Floral City Furnaces, the CAPITOL has embodied in its construction all the best features of the up-to-date furnace. The result is a durable, powerful and economical heater. It's most important feature is the Dome or Body with the outer return flue, or

HORSE-SHOE RADIATOR

The Dome is high enough to give an extra large combustion chamber but the furnace is low enough to fit in shallow basements.

This furnace is heavily constructed and will give the most satisfactory service.

WRITE FOR CATALOG OF OUR ENTIRE LINE.

MONROE FOUNDRY & FURNACE CO., Monroe, Michigan

We Want You

to know about the

Money Making Possibilities

of the

Klylmax Heat Economizer

Improves Any Hot Water Heating Plant

This device is one of the most successful on the market.

It increases the circulation and **gives more heat with less fuel.**

Once Tried—Always Used

You can **increase your sales and profits** by using the Economizer.

Easily Applied. Operates Automatically

Let us send you descriptive Booklet.

We Sell NYE Dies

Kellogg-Mackay-Cameron Co.

Boilers and Radiators

CHICAGO

MINNEAPOLIS **SEATTLE**

CELLULAR OVERDRAFT FIREPOT

Found Only in Our Furnaces

THE BONNOT COMPANY ∴ **CANTON, OHIO**

Kundert & Fitzgerald,

Madison, S. D., writes

"We secured a good tinner through your paper."

TRIPLEX BUFFS

will save you 50% of the present expense in your Plating and Polishing Departments.

They wear twice as long.

Save 20% in composition.

Can be used for cutting or coloring up.

Can be remade to original sizes when worn down.

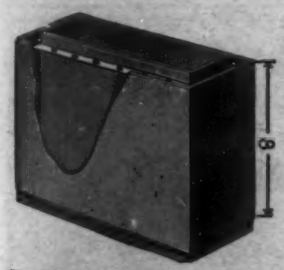
Stove manufacturers and others highly recommend them.

We are the sole manufacturers.

Our **TWO-BAR SILVERITE ANODE** is made in any length desired and is a light sound anode, readily handled and easily cleaned.

Important Notice—Any folded buff not stamped with our trade mark "Triplex," used or sold is an infringement on our license patent and our rights in this respect will be strictly enforced.

Zucker & Leavitt & Loeb Co. **516-524 West 25th Street NEW YORK CITY**



The MICHIGAN SAFETY FURNACE PIPE COMPANY

Corner Brooklyn and Abbott Streets,

DETROIT, MICHIGAN.

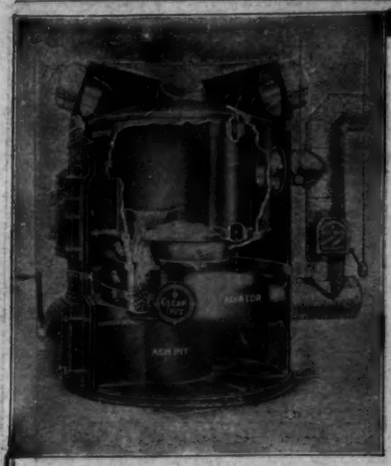
The STIFFEST and BEST Machine-made Pipe on the Market.

The only Sectional Furnace Pipe made in which the Inner Walls Form the Cross Walls.

No Wings to Pull Out. **Write For Catalog.** **No Cleats to Bend.**

Our Large Factory Insures Prompt Delivery.

We are not Connected with any Combination. Do not get us Confused with Other Manufacturers.



Gilt Edge Furnaces

For All Fuels

The most complete line of warm air furnaces made. The most up-to-date—The easiest to sell. Our aim is to co-operate with our Dealers to make each furnace sold an advertisement for him. Sold only through LIVE DEALERS. If you are a live Dealer, you want our catalogue. Write for it.

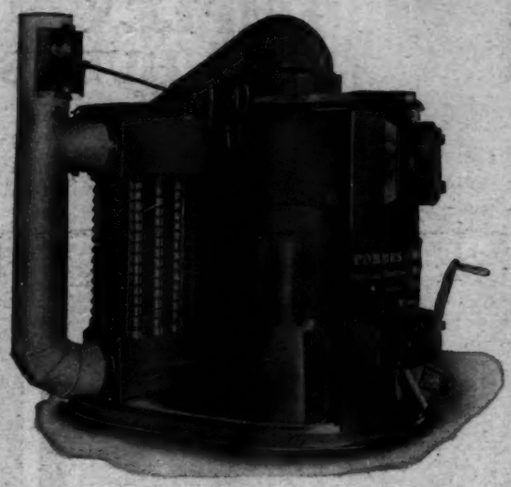
R. J. SCHWAB & SONS CO.
MILWAUKEE, WIS.

The Gilt Edge Low Down

Absolutely the most powerful soft coal furnace made. Burns also hard coal or block wood. Built for wear and has all the GILT EDGE features of construction. Write us about it.

Schwab Side Wall Registers

All the advantages and None of the defects of others. Neatest in design, Positive in operation. Get our Booklet "Modern Methods of Heating Residences." FREE



Forbes Furnace
Height over all—4 Feet, 3 inches

Forbes Furnace

1908 Addition

Particular Attention is Called to our

New Radiating Manifold

Made Exclusively of Cast Iron. No Joints in Flues. Therefore Absolutely Gas Tight.

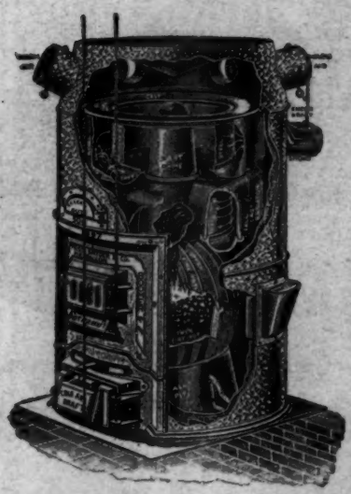
The Forbes Furnace burns either Hard or Soft Coal and is Fully Guaranteed in Every Case.

Write for Our Booklet.

Ask About Our Agency Proposition.

Tubular Heating & Ventilating Co.
228 Quarry St., Philadelphia

A Good Warm Air Furnace



Properly installed, will heat a house more satisfactorily and more economically than hot water, steam or stoves.

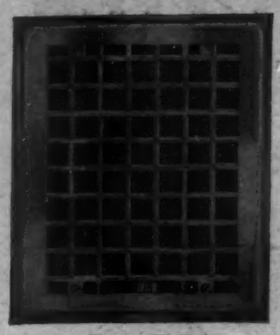
The foregoing statement can be proven if you will sell BOOMER FURNACES and get our ideas about installation.

No one has ever made any money out of light, cheap furnaces; 95% of the consumers will pay the price when value can be shown, after which, no trouble. Let your competitors have the other 5% and the trouble.

Be honest now, are you drifting into the 5% class, or are you going to handle BOOMERS? Get our attractive BOOMER proposition immediately.

The HESS-SNYDER COMPANY
Manufacturers :: MASSILLON, OHIO

Announcement! Wrought Steel



Floor or Wall

We announce that our Self-locking Glide Movement **Wrought Steel** Registers and Faces, as well as our New Semi-Steel goods, are made by us in our own Factory and under our exclusive patents.

A complete stock of all sizes on hand. Send for descriptive matter.

Tuttle and Bailey Manufacturing Company

New York Chicago Boston

Walworth Deflecting Wall Registers

FOR BASEBOARDS

Can be used on a "Double Head."

This register takes the place of the convex, and costs less money.

It takes up no room in the wall pipe, has a face of large open area, is made in standard sizes, fits regular stock sizes of fittings, is equipped with a wall frame and is attached to the pipe in the same manner as the ordinary valve register.

Our registers are made in **THREE STYLES**, Vertical, Horizontal, and Baseboard. We are also makers of the famous **SEMI-STEEL** Floor and Convex Register, all sizes and finish.

Let us quote you prices.

The Walworth Run Foundry Co.

2485 WEST 27TH STREET, CLEVELAND, OHIO.

FOR SIDE WALL

Illuminate Your Store, Church or Factory

with our new **"DUPLEX"** or **"TWIN INVERTED"**

Center Generating, Arc, Hollow Wire System Lamps,

and draw trade after dark. This is the most powerful, simple and safest system of lighting ever placed on the market. These lamps pay for themselves in a short time. We are the Sole Manufacturers of these and the famous Brilliant Lamps. Write for Catalog A. A. H.

BRILLIANT GAS LAMP CO., 42 State St., Chicago

Simplicity, Durability, Economy and Capacity

All of which are essentials of the really Good Furnace, are featured in the

MONCRIEF TOP RETURN FLUE WARM AIR FURNACE

This is a furnace which is unsurpassed for operation and durability.

FEATURES: Burns all grades of hard and soft coal; all cast iron; Moncrief Duplex Grate; large radiating surface; double fire-pot; large grate surface and cleanliness in use. Write for catalogue.

Henry & Scheible Co., 825-29 Long Ave., N. W. CLEVELAND, OHIO

J. C. KIMMEL, 3314 E. 9th St., Kansas City, Mo., Western Sales Agent

Lewis Liedel, Delta, Ohio, writes:

"Please discontinue my want advertisement in your valuable paper. Your paper is worth having as it did more than I could expect."

HARDWARE SPECIALTIES

The "BEST"

SEND FOR ILLUSTRATED CATALOG

THE "BEST" CHIMNEY CAP

Made of Cast Iron. Will last for years.

Is designed to replace the old style galvanized sheet iron hood. The average life of sheet iron is from one to two years. The "Best" will last for years, for cast iron will last longer than any other form of iron or steel when exposed to the weather.

THE "BEST" T CHIMNEY TOP

This top is proving a big seller and is giving perfect satisfaction.

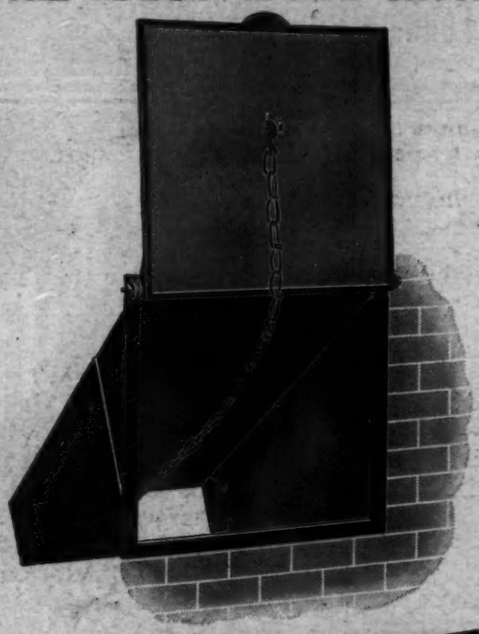
THE "BEST" CAST IRON CHIMNEY FLUE THIMBLE

A Good Thing—Has Merit

THE "BEST" REVOLVING CHIMNEY TOP

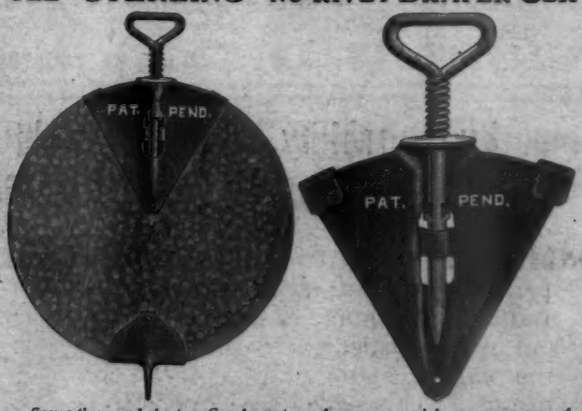
Simple, durable, easy to attach; held as firmly as the chimney itself.

THE "BEST" FUEL CHUTE



The above illustrations show the Chute ready for shipment, and as set in the wall. It is 18 inches square and 36 inches long on top, and sets flush with the wall. The frame and door are cast iron, the tube is made of No. 18 steel. When not in use, draw the chain tight and attach the hook at the bottom of tube, which securely locks the door making it burglar proof.

THE "STERLING" NO-RIVET DAMPER CLIP



Saves time and rivets. Can be put on damper as quick as you can mark the holes for the old style clip. Tail pieces applied same as clip. Sold with or without tail pieces.

STERLING FOUNDRY CO., Sterling, Ill.

Christmas is Approaching

That season of the year when window dressers always "spread" themselves in arranging appropriate window trims, when every effort is expended toward making the store fronts radiate with good cheer and the spirit of the Yule-tide, is almost here.

If the display in your window really reflects the spirit of the times it is a good one and should stand a fine chance of being returned a winner of part of the

$100.00 IN GOLD

which THE AMERICAN ARTISAN is offering in its

WINDOW DISPLAY COMPETITION

A photograph of it should be entered any way. It requires very little effort on your part to do so and the stakes are certainly worth it.

$50.00 **$50.00 in Gold for photograph and description of Best Window Display of Hardware.**

$25.00 **$25.00 in Gold for photograph and description second in excellence.**

$15.00 **$15.00 in Gold for photograph and description third in excellence.**

$10.00 **$10.00 in Gold for photograph and description fourth in excellence.**

CONTESTANTS—Any hardware dealer, or his assistant or clerk, is eligible to this competition.

TIME—The photographs may be sent by mail or express, charges prepaid, and must reach this office not later than noon, March 15, 1909. Address all photographs to

THE AMERICAN ARTISAN PRIZE COMPETITION
355 DEARBORN STREET, CHICAGO, ILL.

CONDITIONS—Each photograph must be signed by a fictitious name or device, and the same name or device must be put upon a sealed envelope, containing the real name and address of the contestant. This sealed envelope is to be enclosed with the photograph.

AWARD OF PRIZES—A Competition Committee of three, one of whom will be an expert window dresser and one an experienced hardware man, will pass upon all photographs and descriptions received within the prescribed time and will decide between the contestants.

THE AMERICAN ARTISAN reserves the right to publish all photographs and descriptions of same submitted in this competition.

We Hear a Great Deal Concerning

Rear View of Front Rank

The Uplift in The Furnace Business

Those who make and install inferior furnaces find their occupation gone in any and every locality where

FRONT RANK STEEL FURNACES

are known.

A few may want low grade apparatus until they have learned the superior advantages of **FRONT RANK FURNACES.**

No one can make as good a furnace as the **FRONT RANK** cheap.

No one can make a better furnace than the **FRONT RANK** at any price.

The demand for the best furnace made has grown to such proportions we have been compelled to open a Branch Office and Salesroom in Chicago where a full and complete line of **FRONT RANK** Steel Furnaces will be carried in stock.

Prompt shipments and courteous treatment at both St. Louis and Chicago

Write Today for Catalog and Printed Matter.

HAYNES-LANGENBERG MFG. CO.

4045-4057 Forest Park Blvd., St. Louis, Mo. 211-213 Lake Street, Chicago, Ill.

ESTABLISHED 1880.

THE AMERICAN ARTISAN & HARDWARE RECORD

Representative of the Stove, Tin, Hardware, Heating and Ventilating Interests.

PUBLISHED EVERY SATURDAY.

TERMS OF SUBSCRIPTION IN THE UNITED STATES AND ITS POSSESSIONS, (Invariably in advance): ONE YEAR, POSTAGE PAID, $2.00.
IN FOREIGN COUNTRIES INCLUDING CANADA, ONE YEAR, POSTAGE PAID, $4.00.
Address all Letters, Communications, and Remittances to

DANIEL STERN, PUBLISHER AND PROPRIETOR,
355 DEARBORN STREET, CHICAGO, ILL.

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CHICAGO, DECEMBER 5, 1908.

THE PUBLISHER IS PLEASED TO ANNOUNCE THAT THE AMERICAN ARTISAN WILL BE SENT FREE OF CHARGE FOR THE REMAINDER OF 1908 TO NEW SUBSCRIBERS FOR THE YEAR 1909. YEARLY SUBSCRIPTIONS SENT NOW WILL BE CREDITED TO THE END OF 1909.

COMMERCIAL failures last week in the United States as reported by R. G. Dun & Co., were 204 against 252 the preceding week and 259 the corresponding week last year.

THE CHANGE in the cash discount on coal and wood stoves to 2 per cent within 30 days, in the territory of the Central Association of Stove Manufacturers, goes into effect on January 1. No objection is being offered by the dealers, as they very generally understand that this change should have really been made long ago and they appreciate the reasonableness of it. A similar change was made in the entire East some eight years ago. The Central Association territory covers Western Pennsylvania, Ohio, Indiana, north of and including Vincennes and West Virginia.

THE United States and Germany have arranged for a postal rate on letters between the two countries of 2 cents instead of the existing rate of 5 cents. The new rates will go into effect January 1. According to an official announcement of the postoffice department at Washington, the new postal agreement between the United States and Germany provides that after January 1, letters for Germany paid at the reduced rate of 2 cents will be dispatched only by steamers sailing from New York for German ports, steamers of the North German Lloyd and Hamburg-American lines sailing from New York usually on Tuesdays and Thursdays. Letters for Germany dispatched via Great Britain or France must be paid at the postal union rate of 5 cents for the first ounce and 3 cents for each additional ounce.

A SHREWD business man recently made the statement: "The way to get business is to go after it." There is nothing extraordinary about this remark, yet in it is contained the sum and substance of the problem of modern business. There are very few things that come to us without an effort, and trade is one of those things that certainly will not come to those who do not go after it. The merchant who is constantly telling the people that he is in business, who advances cogent reasons why they should patronize him, and who backs up his arguments by the quality of his goods, is bound to secure his share of the trade. In other words, the merchant who advertises draws purchasers past the establishments of his non-advertisng competitors, and secures the business.

THE ANNUAL property loss by fire in America is enormous. The figures which are given to describe it are so large that one cannot grasp them easily. A table covering the period since 1876 shows an average for the thirty-two years of $140,000,000. The aggregate for the same time is $4,356,000,000. The insurance loss on this was $2,602,000,000. The world's stock of silver coinage is something like $3,000,000,000. The gold is less than twice that amount. In thirty-two years the United States has burnt up as much property as would be represented by the national debt of Russia or Great Britain. The insurance loss in the same period has exceeded the total amount represented by the debt of the United States today. In fact, when this country had to spend $2,000,000 a day for four long years to put down the rebellion the debt thus created hardly exceeded the insurance losses already mentioned.

Labor-Saving Machinery in Stove Foundries.

AT THE meeting of the Stove Founders' National Defense Association, held in New York City on May 12 of this year, a committee of five was appointed to investigate the machinery in stove foundry use, it having been the recommendation of the association that specific information should be secured upon the various machines now in use in the stove industry. The association, at a meeting held in New York City last month, adopted the report of this special committee on machinery by a vote of 34 to 27.

After the adoption of the report the officers of the Stove Founders' National Defense Association tendered their resignations. As a result, however, of the adoption of a conservative plan of progression at a subsequent meeting the officers reconsidered their resignations, and it was decided that a number of meetings of the stove manufacturers be held in December. Accordingly a meeting of the southern district association of the stove manufacturers was held at the Maxwell Hotel, Nashville, Tenn., on December 3. The Central Association of Stove Manufacturers will meet at Columbus, Ohio, on December 15 and the Western Association of Stove Manufacturers will meet at the Auditorium Hotel, Chicago, on December 8. A general meeting of the stove men will be held again in January.

The report was a very comprehensive one, treating from every aspect the application of machinery to the stove industry, more particularly molding machinery. In its report the committee presented exhaustive information concerning labor-saving machinery and devices that cannot fail to enable all to estimate for themselves the possibilities of economics to be obtained by the use of machinery in stove foundries, and the conditions most favorable to their employment. The committee's report will unquestionably be of invaluable assistance to the stove manufacturers in deliberating upon the attitude that should be taken toward organized labor at the joint conference between the stove men and the molders' union to be held this month, and at which an agreement will be drawn up to supersede that which will expire on December 31 of this year.

In seeking to obtain the fullest information concerning the use of molding and other machines in stove foundries, the committee, besides interviewing stove manufacturers, obtained personal interviews with other foundry men, including a number of molding-machine manufacturers, and visited their plants. As a result of their research, it is almost a foregone conclusion that machinery will be installed in stove foundries whether or not the molders' union are willing to concede or make it the base of their consideration at the joint conference this month. It is a well-known fact that a number of stove manufacturers are now operating molding machines in their plants without incurring the antagonism of the molders. It is also patent that the molders' union has begun to realize that the molding machine has come to stay, that it is a labor-saving device of no small import to the stove industry, and that its introduction, as that of many other labor-saving devices, must be received without opposition.

The committee announced in their report that their investigations have convinced them that there are few, if any, stove patterns that cannot be made on a machine or some form of device or rig that reduces the requirements for molding skill to the point where a laborer of ordinary intelligence may be taught in a short time to produce castings in equal or increased quantity and of equal or better quality than are now made by the average stove plate molder and nearer to pattern weight.

Regarding the employment of green operators on molding machines, the committee has the following to say:

The universal testimony of managers, superintendents and foremen is that the best results are undoubtedly secured by drilling green operators in the use of molding machines. Green operators coming from the foundry yard, from the street, from the country—men of no mechanical skill or trade—can be taught everything that is required for them to produce satisfactory work with the aid of the machine. With a piece price for the work that will enable them, when putting forth their best efforts, to earn more at this work than they had probably dreamed of being able to earn, their interests are bound up with the success of the machine. Far from having any prejudice against it, they are more apt to be enthusiastically in its favor since they have never known any other method of molding or any other occupation by means of which they can earn more than half or two-thirds of what they are able to make on the machine. Herein lies the explanation of satisfactory results that are obtained by the use of laboring help on molding machines. These men are able to earn molders' wages and save the manufacturer 30 to 50 per cent of his molding cost.

The report continues:

The committee came in contact with few manufacturers who have employed journeymen or union molders on the machines with satisfactory results; in fact, it is doubtful if any, of which the committee has knowledge, have attained the full measure of success. The usual method of installing machines in union shops is to employ apprentices to operate them. In some cases the apprentice refuses to work on machines, maintaining that this requirement of his employer is a violation of the contractural obligations of the indenture. In all cases it is more or less of a continuous struggle to maintain machines in operation and progress toward increase of output, and installation of machines is slow and labored in the face of unseen and insistent opposition. A number finding the effort too wearisome have abandoned the machines altogether.

The reasons for the failure of the journeyman molder to produce a maximum output on the machines are two; first, union affiliation undoubtedly has created in his mind a dislike for and prejudice against the machines; second, he lacks a positive incentive to operate the machines to the best advantage. He anticipates no increase in his earning power—the reward is negative. The laborer is promised a large increase in his earning capacity if he gets the most out of the machine—the journeyman molder is promised employment at a less remunerative work or no work at all if he does not operate the machine to its full capacity.

For reasons stated above it is doubtful whether a non-union journeyman would make a better success of the machine than the union journeyman. The fundamental problem is one dealing with human nature perhaps as much as with union labor. Any journeyman has through long years become so accustomed to certain fixed standards of a day's work that he finds it difficult to readjust himself, against all inclination and active prejudice, to new standards of output largely exceeding the old. Inquiry in non-union shops where both floor and machine molders are employed develops the fact that it is difficult even thus, when not encountering union prejudice against the machine, to get a man accustomed to floor or bench work to put up a full day's work on the machine.

The conclusions formed by the committee after the study of molding machines in the stove industry are in part as follows:

1. That the stove industry is far behind others in the employment of labor-saving machinery and devices.
2. Molding machines are successfully used in some stove foundries to reduce molding cost.
3. Those institutions that are making the most use of the machines are also those that are most rapidly adding to their equipment.
4. The best results in the use of the machine were observed in open shops.
5. Best results were seen to be obtained from breaking in a green operator.
6. That all stove patterns can be molded with some form of machine or device already in use.
7. It requires a smaller number of large pieces to be made to pay for new pattern equipment since the saving per piece is larger in proportion to cost of pattern than in the case of small pieces.
8. Through the use of these practically indestructible pattern plates in place of loose iron patterns, the cost of maintaining patterns in repair is reduced and the necessity of preserving and caring for duplicate sets of patterns in wood or iron obviated.
9. The best results may be obtained from a system of specialized labor which allows the machine operator to devote himself exclusively to molding and pouring—that is, allows the machine operator to perform only such work besides actual molding which will still make it possible to hold him responsible for good castings. Carrying iron, shifting weights and strippers, shaking out, and if possible, cutting over sand, should be performed by common labor—machine operators to

be. This suggests the employment of surface or overhead carriers as labor-saving devices.

10. A saving of about 5 per cent of iron in machine over hand-molded castings seems not unreasonable to expect. An incidental effect on factory economy is suggested by the report of a case where a reduction in the cost of grinding and mounting small cast ranges was secured after the castings were molded by machinery.

11. The manner most apt to be successful of making molding machine installation is: First, determine that you have enough patterns of which the necessary number of molds are to be made to keep a number of machines busy; second, see that your organization, from manager to machine operator, is prepared to back the machine with intelligence, energy and enthusiasm; third, select carefully the make of machines best suited to your work, start with not less than two machines and let all be of the same make; fourth, after having begun right, see that your installation continues to work right.

12. The increased use of molding machinery will result in increased standardization of parts and reduction in the variety of patterns.

In concluding its report the committee says:

Looking back in review over our investigation it seems to us that neither the membership nor the committee, at the time of its appointment, realized the magnitude or importance of the work upon which it embarked. What seemed at first a simple task easy of accomplishment loomed larger and more complex upon closer acquaintance, offering a field for practically unlimited study and research. The molding machine division of our investigation of course overshadowed in importance the others, and to it we gave most of our time. We raised many questions to which we tried to find the answers. To the most important we believe the answers to have been found; others have been only partially answered. Contingent questions suggested in the course of our investigations were only stated and answers not even suggested. That this report is thus inadequate in certain respects we are keenly conscious; nevertheless, whatever else it may be it is the product of careful study and investigation with conservative conclusions based upon the conditions encountered in our investigation.

The Parcels Post Scheme.

APART from the fact that a parcels post law would be the means of administering a crushing blow to every retail merchant in the country, the establishment of parcels post would be tremendously expensive to the United States government. Millions would have to be laid out in equipment, more millions in salaries, and hundreds of thousands in rental for office space, warehouse storage, stabling, etc. Postmaster General Meyer's careless and overconfident claim that parcels post would make the postoffice department a paying proposition is not well-founded. Even if his statement were based on demonstration, this country does not want a parcels post system that would kill every business in the small towns except perhaps butter, eggs, vegetables and made-to-order clothing. What chance will the small dealer have in competition with Goliaths of merchandising who send out catalogues of thousands of pages and sell anything from a needle to an anchor? He simply cannot compete with them. The day that parcels post goes into effect he must prepare to go out of business.

In the face of the wail of Postmaster General Meyer that $9,000,000 of his very large deficit for last year was due to added employes and increased pay roll, his suggestion that parcels post would make the postal system pay is nothing short of ridiculous. In the past seven years 99,000 tax-eaters were added to the civil service. The taxpayer hands them $65,000,000 a year. What an army must be added, if the postoffice department undertakes a general express business, in addition to forwarding the present four classes of mail. Mr. Meyer appears to be woefully lacking in business experience.

Banner Month for New Incorporations

WITH the exception of the month of June, the aggregate capitalization of the corporations formed in the Eastern states during November was the largest of any month this year, and was more than $100,000,000 greater than the total for November of last year. Capital as represented by the new incorporations with $1,000,000 or more that filed papers in Maine, New Jersey, New York and Delaware, aggregated $149,900,000 as compared with $42,000,000 in the corresponding month of 1907. While there has been a great expansion in the matter of incorporating new concerns in the Eastern states in the last two months and the totals for October and November exceed those of the corresponding months of last year, the total capitalization of large companies formed this year to date is considerably below the total capitalization in the corresponding period of 1907. In the 11 months of last year the total capitalization of such concerns amounted to $1,251,650,000, which compares with the total for the same period of this year of $996,023,250. A comparison of the totals of October and November of this year with the same months of last shows nothing, as in the latter period the country was in the throes of a panic, and new companies formed in that period were chiefly those forced by reorganization of bankrupt concerns and those which had been waiting only the formal filing of incorporation papers.

New Jersey with five large companies was first as an incorporating state, the total capitalization being $69,200,000. This is of interest, inasmuch as the state of Maine has for almost two years taken the lead in this respect. However, Maine was second on the list and not far below the total of New Jersey. New York came next to Delaware in fourth place and had but one large company, there having been no large concerns formed in Massachusetts. With business conditions improving all the while and with the hoards of money turned loose, there is every indication that 1909 will witness great things in the way of the organization of new enterprises.

RANDOM NOTES AND SKETCHES.

BY SIDNEY ARNOLD.

When the invention of a "noiseless" rifle was announced some time ago a great many persons whose knowledge of things military was limited to the witnessing of martial parades failed to appreciate the utility of the device. It was apparent that a noiseless firearm would be of advantage to criminals, and while the hushing of the battle roar would be a step in anesthetic progress, it did not appear of great moment whether the musketry "rattled" or faintly popped. The new weapon has recently been subjected

to an official test, and the comment this test has aroused will enlighten the civilian. At close range the new rifle is "noiseless" merely by courtesy; the sound of its discharge has been reduced by 74 per cent, and at a distance of 1,500 yards only a faint click can be heard. Under the actual conditions of war, however, the gun would be practically silent, as is made apparent by this explanation in a metropolitan newspaper:

The effective range of a rifle aimed at an individual mark is not far beyond 1,000 yards, in normal conditions. At 1,500 yards it is practically of no moment to a single, detached soldier, whether his enemy sees or hears him or not. At 2,000 yards, however, it is possible to fire effectively into a mass of infantry or cavalry. Thus the smokeless weapon, silent at that distance, would be of great efficiency in such conditions.

With two contending armies supplied with such a rifle as this, our present-day battle conditions would undergo a remarkable change. The progress of an infantry attack upon a flank, for instance, would no longer be revealed to a commanding officer by the advancing or receding crackle of the musketry fire. Skirmishers clad in the well-nigh invisible uniform of the modern service and supplied with noiseless rifles using smokeless powder would be impossible to locate.

* * *

Ferdinand Antoine of New Orleans, La., has invented a device that the laziest of us and those of us who believe that "only fools and horses work," will welcome with open arms. Antoine's ingenious device would make a living for him without its owner doing anything but scoop up the change as the money would come his way. And it came, too. Like most great inventions, it is a simple contrivance, and is operated with the utmost ease and facility. The inventor, who has not yet patented it, I am informed, was operating it in a Jesuit's Church in the Crescent City, when Brother Peter caught him with the goods. The contrivance consisted of a long, thin, light stick, the end of which was smeared with tar. Holding the unsmeared end in his hand, Antoine, when he thought no one was looking, would place the tarred end in the contribution box of the church and "lift out" all that adhered to the stick. The coins he detached, he placed in his pocket, and set the stick again to work. For several weeks the Jesuit fathers wondered at the remarkable falling off in contributions. Even on the theory that hard times had come among them they could not account for so many worshippers leaving so few nickels and dimes in the boxes. After thinking and talking it over it was decided that Brother Peter should stand at the entrance of the church near the boxes and see if the worshippers placed coins in the boxes, or if, after they were contributed anybody stole them. It was while playing detective that Brother Peter saw Antoine with the innocent-looking stick in his hand. The instrument looked much less harmless than the possessor of it, and Brother Peter accordingly watched Antoine and thought no more of the stick until he saw it raised slowly and the end go into one of the contribution boxes. When it came out Brother Peter got wise to the fact that some of the contributions adhered to it, and poor Antoine was locked up. When his pockets were searched enough nickels and dimes were found in them to wipe off the debt on the church. A small package of tar was also found on the ingenious Antoine's person. For ways that are dark and tricks that are vain this is about the limit.

* * *

David G. Cooper of Terryville, Conn., who made a fortune in the manufacture of oven thermometers for ranges, was supposed by his friends to have been a bachelor all his life. When he died several months ago his two nieces, who took charge of his home and his office work, were believed to be heirs to his estate of $150,000. Mr. Cooper's will, however, has disclosed the fact that he had a wife and twelve children in Chile, South America, to whom the greater part of the estate goes. Mr. Cooper, it is said, had legally married a South American woman, and the will simply acknowledged the legal rights of the widow and childen to the estate. In view of the fact that Cooper was so uncharitable toward his nieces, who looked after his business and took care of his home, I am not surprised that Cooper when alive left no orders that the temperature of his coffin should be taken, for there is no doubt that the thermometer would have indicated a temperature of extreme frigidity.

* * *

Here is some good advice if at any time you feel disposed to quit the game because you have met a reverse, or because things are not going as well as you think they might, or because you realize you have made a mistake:

DON'T GET DISCOURAGED.

"Don't get discouraged because you have made a mistake. There has never been a human being who did not make some mistakes. The best we can do is to try not to make the same mistake again. In this way, our work will become more and more accurate and we will become more and more reliable.

"Don't get discouraged because you are blamed for something you did not do. Explain the matter in a straightforward manner if you can; if you can't do that, circumstances seeming to point to you as the guilty party, just wait. Time will clear up the whole matter and exonerate you from all guilt.

"Don't be discouraged because others seem to be making a brilliant success of life while your are only making moderate advancement. Meteors make a brilliant dash, but they soon die out and are heard of no more.

"Don't get discouraged because you have lost your position through no fault of your own. Many a man has arisen from such an experience to higher and better work than he would have gained if he had held the old place.

"Don't get discouraged because people laugh at you and ridicule you when you are trying to do things right. Every successful man has had the same experience; in fact, it seems to be one of the prices we have to pay for success.

"Don't get discouraged about anything when you are striving to do your best. Everything will come out all right and you will laugh tomorrow over the cares and worries of today."

News Siftings

Fire on November 19 did $10,000 damage to the plant of the Mobile Stove Works at Mobile, Ala.

The capital stock of the Ward-Dickey Steel Co., Indiana Harbor, Ind., has been increased from $50,000 to $100,000.

The plant of the Snyder & Baker Stove Works at Belleville, Ill., was recently damaged by fire to the extent of $7,000.

The Republic Stove Mfg. Co., Cleveland, Ohio, has let the contract for a two-story brick addition to its factory buildings.

The American Molding Sand Co. of Columbus, O., has been incorporated with a capital stock of $25,000 by W. B. Kizer, C. S. Rose, H. M. Freck, J. A. Tingle and T. M. George.

The Lee Foundry Co., of Anniston, Ala., recently incorporated with a capital stock of $25,000 by J. B. Lee and others, has purchased and will operate the plant of the Anniston Stove Works.

The Southern Queen Range Mfg. Co. is the name by which the T. A. Snow Co. of Chattanooga, Tenn., will in future be known. Ranges, broilers and hotel appliances will be manufactured as in the past.

John W. Boehne, mayor of Evansville, Ind., and a prominent stove man of that city, will relinquish the mayoralty about March 4, 1909. Mr. Boehne was elected to Congress from the First Indiana District at the recent election and will be sworn in as a congressman in March.

The Stove Founders' National Defense Association met in New York City last week for the purpose of receiving the report of the special committee appointed at the meeting held in New York in May last, to obtain data relative to molding and other machinery now in use in stove foundries. Extracts from this report are printed in the editorial department of this issue. The National Association of Stove Manufacturers also met to hear the report of the Central Council.

The National Commercial Gas Association will hold its annual convention in the First Regiment Armory, Michigan avenue and 16th street, Chicago, on December 8, 9 and 10, with sessions from 10 a. m. to 2 p. m. of each day. Coincident with the meeting and throughout the week the association will hold its annual exhibition of gas appliances. Some very interesting papers will be read at the convention. Headquarters for the association will be at the Wellington Hotel.

"Foster's Opal" range is one of the newest products of the Foster Stove Co., Ironton, O. It is made in several sizes, all of which are fitted with duplex grates. If so desired, all sizes can be furnished with steel high closet, reservoir, water front, oven thermometer and towel rod. "Foster's Opal" range is constructed on scientific principles and is very attractive in appearance. The Foster Stove Co. say that it is proving to be a ready seller, and that it is coming more and more into general popularity. When writing The Foster Stove Co. for further information concerning this and other of their ranges kindly mention THE AMERICAN ARTISAN.

DICKEY PLANISHED SHEET STEEL.

The No. 27 Dickey planished sheet steel, manufactured by the Ward-Dickey Steel Co., Indiana Harbor, Ind., possesses a number of features which have been the means of rendering this steel very popular. Tests that have been made from time to time, the manufacturers assert, have proved the capacity of this steel to withstand intense heat. The fact that it is guaranteed not to break is another important feature. Dickey planished sheet steel has the imported Russia iron finish, and will, it is said, hold its color under the most severe tests. Descriptive literature may be had upon request. When writing, kindly mention THE AMERICAN ARTISAN.

"PRINCESS" RANGE WITH RIGHT-HAND RESERVOIR.

The Allen Mfg. Co., Nashville, Tenn., state that the right-hand reservoir of their "Princess" steel range is the only right-hand one that will heat the water without interfering with the baking in the oven at the same time. The water is heated by connecting the reservoir with two pipes to a water back located in the back flue. This utilizes the heat after it performs its work inside the range. The reservoir is made of copper, tinned inside, with drain tube in the bottom. It has a capacity of 11 gallons. The construction above referred to is claimed to overcome the objections to the flue-damper reservoir and contact-heating reservoir, neither of which, the Allen Mfg. Co. say, has been a successful method of heating water. The flues and body of this range are lined with asbestos, held in position by cast-iron plates. The broad cast shield protects the exposed part of the oven top. It is well braced with heavy cast rib that acts as a support to the top. The oven bottom is made in two pieces, and seamed with heavy flange to hold it in position. When writing the Allen Mfg. Co. for further particulars regarding this range kindly mention THE AMERICAN ARTISAN.

THE MARION STOVE CO. TO MANUFACTURE MALLEABLE RANGES.

The Marion Stove Co., Marion, Ind., manufacturers of "Special Retort" and "Retort" oak stoves for soft coal, are now making their announcements for the coming year's business. The company has concluded a deal with the trustee of the Home Pride Malleable Range Co. of Marion, Ind., whereby the Marion Stove Co. will become the owners of all the property in the hands of the trustee. They are now moving this property to their plant and expect soon to be in a position to furnish repairs for the "Home Pride" range, and by February 1, 1909, they expect to be doing a regular range business making the "Home Pride" the same as it was made by the Home Pride Malleable Range Co. before they went into liquidation.

You will sell more goods, and you will sell them at a greater profit, when everyone in your store thoroughly knows the things you offer for sale.

The Hardware Record.

THE AMERICAN ARTISAN AND HARDWARE RECORD is the only publication containing western hardware and metal prices corrected weekly. You will find these on pages 34 to 39 inclusive.

The Idaho Retail Hardware & Implement Dealers' Association will hold its convention at Boise, Idaho, on December 11 and 12.

S. M. Busby, member of the hardware firm of James & Busby, Chrisman, Ill., died suddenly on November 26 at the age of 69 years.

McWhorter, Hutton & Co., is the name of a new concern that will engage in the hardware jobbing trade at Nashville, Tenn.

The Bonney Vise & Tool Works, Philadelphia, Pa., have purchased a factory at Allentown, Pa., which they will operate to take care of increasing business.

The Great Western Wire Fence & Mfg. Co. of St. Louis, Mo., has been incorporated with a capital stock of $20,000 by Christopher H. Frederick, Jr., H. M. and I. J. Young.

The Beeman Lock Co. of Cleveland, O., has been incorporated with a capital stock of $20,000, to manufacture a new sash lock. Marcus A. Beeman is at the head of the enterprise.

The annual meeting of the Chicago Retail Hardware Association will be held on Friday evening, Dec. 11, at Room 412 Masonic Temple, Chicago, at which officers will be elected for the ensuing year.

The Morgan Mfg. Co. of New York City has been incorporated with a capital stock of $20,000 to manufacture polish for metals, etc. The incorporators are Robert Oppenheim, Wm. H. Quinn, and Monroe Goldwater.

The Embury Mfg. Co. of Rochester, N. Y., has been incorporated with a capital stock of $75,000 to manufacture lanterns and lamps. The incorporators are Wm. C. Embury, Frederick L. Walker and Edna E. Embury.

The Eclipse Metal Stamping Co. of New York City has been incorporated with a capital stock of $4,000, to manufacture stamped metal and metal wares. The incorporators are Samuel J. Klein, Frederick L. Klein and Zigmund Israel.

The Spargo Wire Cloth Co. of Rome, N. Y., has been incorporated with a capital stock of $50,000 to manufacture and deal in iron, brass and wire cloth. The incorporators are James A. Spargo, John T. Wiggins and John Baynes.

The Schwartz Plumbing Supply Co. of New York City has been incorporated with a capital stock of $6,000 to manufacture hardware and plumbers' supplies. The incorporators are Isadore Schwartz, Rubin Solomon and Wm. G. Solomon.

Suit was recently filed in the Superior Court at Chicago, by J. Allen Haynes for the appointment of a receiver to take over the affairs of the West Wire Sales Co. of Chicago. Mr. Haynes, who owns stock in the company, is credited with being dissatisfied with the manner in which the business is being conducted by Richard Wick, president of the company, alleging that the latter has personally profited at the expense of the company.

The Border Bolt & Nut Lock Co., Richmond, Ind., says that their "Hobin" nut-lock washer and bolt is the best nut-lock that is offered today on the market. It is nickel plated, and the manufacturers say that they are doing a large business with it.

The factory of the Turnerized Metal Roofing Co. at Bessemer, Ala., has been completed, and according to President Turner upwards of 100 men will be given employment. Half a block of land has been purchased and a warehouse has been erected.

The resignation of James Gayley as vice-president and director of the United States Steel Corporation, has been accepted by the Board of Directors of the corporation. Alfred Clifford of St. Louis, was on November 24 elected a director to succeed Mr. Gayley.

Morris B. Belknap, vice-president of the Belknap Hardware & Mfg. Co. of Louisville, Ky., has been appointed chairman of the advisory board of the Republican Executive Committee of Louisville and the county in which it is situated. Mr. Belknap was a candidate for governor of Kentucky in 1903.

The annual ball of the Chicago Retail Hardware Association will be held on Wednesday evening, January 27, on the seventeenth floor of the Masonic Temple, Chicago. Simon J. Koehler, 314 W. 63d St., is chairman of the committee, which includes E. L. Sommers, A. J. Engelhardt, W. H. Bennett and G. R. Lott.

The Bullard & Gormley Co., hardware dealers, Chicago, have leased a five-story building, 45x169 feet, at 53-55 Lake street, and a six-story building, 60x68 feet, at 41-43 State street, Chicago, for a term of years commencing May 1, 1909. The company will occupy the State street building as a retail store and use the Lake street building for its wholesale business. The rent for both buildings is said to approximate $360,000.

The M. Brown Co., Wapakoneta, Ohio, have sent out a catalogue of their bent wood churns, ash dash churns, washing machines and wood measures. The M. Brown Co.'s "United States" washing machine is very fully described in the catalogue. This machine is reputed to be cheap, simple in construction, durable, and to do the work perfectly with the smallest amount of labor. The company's various styles of churns and measures are also described in the booklet.

Smith & Hemenway Co., 108-110 Duane street, New York City, are calling the attention of the trade to their "Red Devil" hack saw frame, which has a gun metal finish. It is provided with a level lock and is said to be very easily adjusted. Smith & Hemenway Co. state that this hack saw frame is giving general satisfaction wherever used and that it is becoming very popular with the trade. When writing Smith & Hemenway Co. concerning the "Red Devil" kindly mention THE AMERICAN ARTISAN.

One of the most useful and substantial souvenirs given away at the recent Memphis conventions was a combined wallet and card case distributed by the Standard Chain Co. of Pittsburg, Pa. Each souvenir

contained a $2,500 accident policy issued by a Chicago accident insurance company upon the receipt of 25 cents for registration, for fatal injuries sustained while traveling in a conveyance provided by a common carrier. The Standard Chain Co. was the recipient of numerous compliments from all those who received their souvenir at the Memphis conventions.

The Continental Co., Penobscot Bldg., Detroit, Mich., are sending out a hanger to all jobbers and retailers who handle Continental screen goods. The hanger is printed in two colors and the danger is pointed out of the prevalence of flies and mosquitoes in houses carrying filth and disease. The word "Danger" is printed at the top of the hanger in three-inch red letters, and newspaper clippings are reproduced which tell of the disease germs that flies carry with them. "Screen your windows" is the advice given to prevent entrance into buildings of germ-carrying pests.

The North Dakota Retail Hardware Association advises that through error they have been announcing for several weeks past the dates of their next annual meeting as January 28, 29 and 30. They wish it to be understood that the convention will be held at Bismarck, N. D., on January 26, 27 and 28. The meetings will be held at the Commercial Club Rooms in Bismarck, and the official headquarters where exhibits will be held will be at the Grand Pacific Hotel. W. R. McIntosh of Bottineau, and C. N. Barnes of Grand Forks, are president and secretary, respectively, of the association.

A Washington dispatch to the *Chicago Tribune* under date of November 27 says: "Nelson Lyon, secretary-treasurer of a company manufacturing wire articles at Tarrytown, N. Y. (the Holt-Lyon Co.), claimed that if the entire tariff had been removed from pig iron during the last year the American manufacturers would have received $153,000,000 more than they received for the product in 1904. In that year, he added, a profit was made, 'for the steel trust does not produce unless it produces at a profit.' In an attack on the 'steel trust' Mr. Lyon said that during the panic last fall 'our great and good President Roosevelt, who rules our land in righteousness, allowed the steel trust to turn 70 per cent of its employes out to starve.' He said the president encouraged this corporation to absorb its competitor, the Tennessee Coal and Iron Company. He added: 'Why our great president is following the Standard Oil Company to prevent it shipping oil a few cents cheaper than its competitors and lets this steel trust go 'scot free' while stealing from the public, through the robber tariff, from $1,000,000 to $2,000,000 a year, is beyond my comprehension.'"

WRITE FOR THIS BOOKLET.

"What We Know About Automobiles" is the title of a neat little booklet that is being sent out by the W. F. Robertson Steel & Iron Co., Cincinnati, Ohio. It matters not whether it is a four or a six-cylinder, four or forty-horsepower machine about which information is sought, the description of the one is as full and complete as of the other. Neither are gasoline machines alone described, for the electric auto is quite as important, in the opinion of the W. F. Robertson Steel & Iron Co., as the gasoline. To those who may not be interested in automobiles the booklet will be found of value as a memorandum book, for it contains a number of pages which may be used for that purpose. Those whose knowledge of automobiles may be somewhat limited should send for this booklet, for after perusing its pages they will realize to a greater extent than ever before the paucity of their automobile knowledge. When writing the W. F. Robertson Steel & Iron Co. for this booklet kindly mention THE AMERICAN ARTISAN.

CATALOGUE OF THE STERLING FOUNDRY COMPANY.

The Sterling Foundry Co., Sterling, Ill., have recently issued a catalogue and price list of their well-known line of hardware specialties. The "Best" chimney cap is an article that is very familiar to the trade. It is made of cast iron and is designed to replace the old style galvanized sheet-iron hood. The manufacturers say that this cap will last for years, for the reason that cast iron is not affected by exposure to the weather to the same degree as sheet iron or steel. The "Best" chimney cap is made in three sizes and the legs have a radical adjustment so that each size will fit any chimney up to the largest size for which it is designed. The legs project inside the chimney to prevent the cap from blowing off. It is not necessary to use mortar or cement to fasten this cap to the chimney as the legs will keep it in place.

The "Best" revolving chimney top is simple, durable and easy to attach. It is made of cast iron with the exception of the vane, which is of heavy steel. Being fitted with ball bearings above and below to take the side thrust, the slightest breeze turns the back of the hood to the wind, and causes a suction at the opening which draws the smoke out, thus making a strong draft for the chimney. This chimney top is said absolutely to prevent rain from beating into the chimney and running down and discoloring the walls inside.

The "Best" T chimney top is said to be proving a big seller and to be giving universal satisfaction. The T is cast in halves and bolted together at the top and with two bolts at the bottom, which act as a clamp and hold the T rigidly to the collar of the cap. The openings may be set in any position desired to suit the conditions under which the top is to be used.

The "Best" fuel chute is one of the most popular of the Sterling Foundry Co.'s specialties. It is 18 inches square and 36 inches long on top, and sets flush with the wall. The frame and door are cast iron, the tube being made of No. 18 steel. It is provided with a flange which overlaps the top of the door, thus preventing rain from running down the chute and rusting it out. The Sterling Foundry Co. state that this fuel chute is a ready seller with leading dealers everywhere. Among the company's other products described in the catalogue may be mentioned the "Best" cast-iron chimney flue thimble; a foot scraper for concrete walks, which sits solid in the concrete and even with the top and edge of the walk; and an automatic

door holder to prevent the door from slamming off the hinges. When writing the Sterling Foundry Co. for catalogue kindly mention THE AMERICAN ARTISAN.

GARDEN HOSE AND LAWN MOWERS IN A WINDOW DISPLAY.

The window display of garden hose and lawn mowers made by the Harry Mead Co., of Shawnee, Okla., was very favorably commented on by the judges in THE AMERICAN ARTISAN'S hardware window display competition. The border surrounding the hose in the background was made of rope. On the bottom and at the extreme back was a little terrace. An excellent imitation of grass was made by coloring excelsior with dyes. A gravel walk was shown in the center of the window running from the front to the back. There were two pots of ferns in the walk. Two circles were made in the "grass" in which sand was placed, with artificial roses in the center thereof. A few grass hooks and shears were placed in the window.

Honorably Mentioned by the Judges in THE AMERICAN ARTISAN'S Hardware Window Display Competition—Submitted by the Harry Mead Co., Shawnee, Okla.

$100.00 IN GOLD FOR HARDWARE WINDOW DISPLAYS.

Your show windows are the index to your store as a man's face is the index to his soul. If your windows are neglected so that they do not attract the attention of people who pass your store, the latter are justified in forming the opinion that there is indifference existing inside. Christmas will soon be here and now is the time to get busy with your windows, for you will find that at this time, especially, they will be your best salesman. Enter THE AMERICAN ARTISAN'S contest and try to carry off part of the $100.00 in gold that will be given away for hardware window displays:

A list of prizes to be awarded, and the conditions governing the contest follow:

The Prizes.

The prizes will be awarded as follows:

First Prize, $50 in gold for the best photograph and description received of a window display of hardware.

Second Prize, $25 in gold for the photograph and description second in excellence.

Third Prize, $15 in gold for the photograph and description third in excellence.

Fourth Prize, $10 in gold for the photograph and description fourth in excellence.

The Conditions.

The conditions of the competition are as follows:

The photographs may be sent by mail or express, charges prepaid, and must reach this office not later than March 15, 1909. Address all photographs to THE AMERICAN ARTISAN Prize Competition, 355 Dearborn street, Chicago, Ill.

Each photograph and description must be signed by a fictitious name or device and the same name or device must be put upon a sealed envelope containing the real name and address of the contestant. This sealed envelope is to be enclosed with the photograph.

Award of Prizes.

A competition committee of three will be appointed, one of whom will be an expert window dresser and one an experienced hardware man. This committee will pass upon the merits of all photographs and descriptions received, without knowing the names or addresses of the senders, and will decide the winners of the contest.

THE AMERICAN ARTISAN reserves the right to publish all photographs and descriptions submitted in this competition.

STANDARD HARDWARE SHELF BOXES.

W. B. Heller & Co., Montpelier, Ohio, are sending out a circular telling of the merits of their standard hardware shelf boxes and of their "Simple System" which enables the hardware merchant to keep all goods of one kind together and to display them to the best advantage. By means of this system the mer-

chant always knows when his stock is running low so that he never has to tell a customer that he is just out of what he (the customer) is looking for, only to discover the next day that there was plenty in stock. Heller's steel shelf boxes have been on the market for years. W. B. Heller & Co. state that many of the best hardware stores in the country have thrown away their old wooden boxes and have put in Heller's steel shelf boxes. A postal will bring the inquirer complete information regarding the "Simple System." When writing W. B. Heller & Co. kindly mention THE AMERICAN ARTISAN.

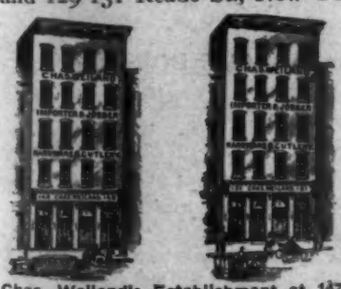
THE "WIZARD" ADJUSTABLE HINGE HANGER.

The Safety Door Hanger Co., Ashland, O., and Hamilton, Ont., have put on the market the "Wizard" adjustable hinge hanger, with lateral and vertical adjustment. This hanger is made of the best quality of malleable iron, and the two sets of steel roller bearings reduce friction and render it an exceptionally easy running hanger. The "Wizard" is shown in the accompanying illustration, and with it no special track is required. The Safety Door Hanger Co. state that this hinge hanger is proving to be a ready seller. When writing for prices kindly mention THE AMERICAN ARTISAN.

The "Wizard" Hinge Hanger.

THE JOBBING HOUSE OF CHAS. WEILAND.

The firm of Chas. Weiland, 147-149 Chambers St., and 129-131 Reade St., New York City, is one of the largest exclusive wholesale hardware and cutlery houses in the United States. As will be seen from the accompanying illustrations the establishment extends through from Chambers to Reade Streets. The large wholesale net price catalogue which Chas. Weiland sends on request to merchants, embraces a very complete line of machinists' and mechanics' tools and cutlery, which is the specialty of this well-known jobbing house. Chas. Weiland is the exclusive agent for a number of foreign and domestic manufactures of these goods and such articles as files, saws, hack saw blades in all grades are carried in great assortments. The cheaper as well as the finest grades of cutlery are also carried. The business of Chas. Weiland was established in 1882, and is one of the best known of its kind in the country. When writing for catalogue kindly mention THE AMERICAN ARTISAN.


Chas. Weiland's Establishment at 147-149 Chambers St. and 129-131 Reade St., New York City.

"ELECTRA" COPPER CABLE LIGHTNING RODS.

The Electra Lightning Rod Co., Cresco, Ia., strongly urge the importance of protecting life and property with the "Electra" system of pure copper lightning rods, which the company says, represents the best that facilities and painstaking study can produce. Their 30-strand "Electra" copper cable is made of 99⅞ per cent pure copper. It is put up on 500-foot and 1,000-foot reels. The Electra Lightning Rod Co. are prepared to back up the merits of their system of pure copper cable lightning rods by a written guarantee as strong and liberal as the most exacting can demand. The marvelous progress of electrical science and the ever increasing demand for the best conductor of electricity, has caused pure copper to almost entirely replace steel and iron. The high conductivity and non-corroding properties of pure copper, give it an immense superiority over other metals. Its greater price per foot is compensated for by its lesser weight per unit of resistance. When writing the Electra Lightning Rod Co. for full information concerning the "Electra" system of lightning rods, kindly mention THE AMERICAN ARTISAN.

RAT TRAPS OF THE BROMWELL BRUSH & WIRE GOODS CO.

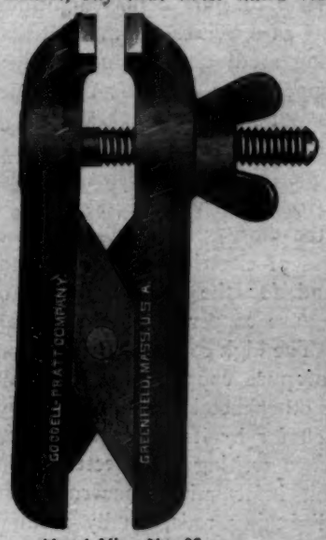
The Bromwell Brush & Wire Goods Co., Cincinnati, O., are sending out a circular in which their extensive line of rat and mouse traps are very fully described and illustrated. They state that their rat traps are the strongest, best made and most salable traps on the market. The accompanying illustration shows the method employed of locking the mesh-wires of their "Ready," "Surprise" and "Clipper" traps, by clinching hooks firmly over the mesh-wires, preventing the rats or mice from enlarging the space between the wires and escaping from the trap. The ribs of these traps are made of tempered steel wire, well coppered. The "Surprise" is one of the company's latest style of trap. It has rounded ends, and it is 15 inches long, 8½ inches wide and 6½ inches high. The mesh is made of No. 17 coppered wire and there is a patent flange around the opening that positively prevents the escape of rats. Each trap is lacquered with the company's patent rust-proof lacquer. The "Ready" rat trap is always set and "ready" to catch rats. Like the "Surprise" it has rounded ends. It is 19 inches long, 10½ inches wide, and 8 inches high. The "Clipper" mouse trap is of the same form and construction as the "Surprise" rat trap. The "Climax," "Hold-Fast" and "Giant" are the names given to other rat traps manufactured by The Bromwell Brush & Wire Goods

Cut Showing How the Mesh-Wires of Bromwell Rat Traps Are Locked.

Co. When writing for 1909 catalogue kindly mention THE AMERICAN ARTISAN.

HAND VISE NO. 96 OF THE GOODELL-PRATT CO.

The Goodell-Pratt Co., toolsmiths, Greenfield, Mass., say that their hand vise No. 96, shown in the accompanying illustration, marks an advance in the construction of hand vises that will readily be appreciated by a large army of users. At all times and in all positions the jaws of this vise are parallel. The faces of the jaws are scored and case hardened; they open 1⅜ inches. The manufacturers believe that their hand vise No. 96 is a tool which every hardware dealer should have in stock, for its good qualities are resulting in increased sales of this tool. The Goodell-Pratt Co. have some other hand vises which have unique features in their construction and concerning which the company will be pleased to furnish detailed information upon request. When writing the Goodell-Pratt Co., kindly mention THE AMERICAN ARTISAN.



Hand Vise No. 96.

"OUR DRUMMER" FOR DECEMBER.

The December issue of "Our Drummer," otherwise known as Catalogue MC 695, of Butler Bros., Chicago, is now being distributed. It contains upwards of 500 pages, and in it are listed numerous holiday "specials" at unusually attractive prices. Catalogue MC 695 is described by Butler Bros. as a "just-now profit opportunity—a success-maker." They say that it means more to the dealer than it ever has before, for not only does it list 50,000 genuine prosperity-boomers, but it is a sure holiday market. The colored pages of the big catalogue probably show as large an assortment of holiday "specials" as any catalogue ever sent out by Butler Bros. The lamp section embraces everything in chimneys, lamps and lanterns from the "popular priced" to the best. The December "specials" in tin and enameled ware include many items especially suitable for gifts. The tinware section of the catalogue shows a very large assortment of articles of uniform standard quality. Butler Bros. state that some months ago they took advantage of the uneasiness of the tinplate market to place large contracts when mills were dullest, with the result that they now have warehouses full of goods owned at less than market prices, and that they are now sharing the benefit of lowered costs in the selling prices of the numerous articles of tinware listed in the catalogue. The line of enameled ware shown is a very large and comprehensive one and the prices are as attractive as ever. Butler Bros. state that they have the most complete line of hardware specialties in existence, and that they control the output of many of the best things in hardware listed in the catalogue. Some rare "specials" are shown in seasonable hardware and the cutlery "specials" are all suitable for holiday sellers. There are also listed in the catalogue wire goods, farm and garden tools, stoves and ranges, and sporting goods in great variety. When writing Butler Bros. for Catalogue MC 695 kindly mention THE AMERICAN ARTISAN.

THE "CLIPPER" LAWN MOWER.

The Clipper Lawn Mower Co., Dixon, Ill., manufacturers of hand and pony mowers and marine gasoline engines, state that they are receiving numerous inquiries concerning their improved "Clipper" lawn mower. The cutter bar of this mower is directly in front of the wheels. The wheels travel over the ground where the grass is cut, and do not roll down the standing grass. The "Clipper" mower is provided with small gauge wheels at the sides which gauge the height at which it is desired to cut the grass. The knives can be sharpened in the machine with a small file or whetstone, or they can be taken out and ground. An important feature of the "Clipper" mower is that it does not touch the grass until it cuts it. The "Clipper" is light, durable, simple in construction and not liable to get out of order. Nothing is said to escape the grasp of this mower, weeds, dandelion and plantain being cut as closely and evenly as grass. The height of the grass is said to be immaterial to the clipper as it only requires the same power to cut grass two feet high as it would to cut two inches. It cuts very closely on irregular surfaces and spaces, such as between posts of fences, walks and shrubbery. The Clipper Lawn Mower Co. state that there is no use for sickle or shears where the "Clipper" is used. Descriptive literature may be had upon application. When writing for it kindly mention THE AMERICAN ARTISAN.

RETAIL HARDWARE DOINGS.

NEW FIRMS AND CORPORATIONS.

Elizabeth City, N. C.—The Sharber-White Hardware Co. has been incorporated with a capital stock of $25,000.

Knoxville, Tenn.—The Lowe-Hord Hardware Co. has been incorporated with a capital stock of $100,000 to do a general hardware business.

Logan, Utah.—The LaFount Hardware Co. has been incorporated with a capital stock of $50,000.

Portland, Ill.—G. Gruenwald has opened a hardware store.

Fort Smith, Ark.—The Stanton-Lundberg Hardware Co. of Pittsburg, Kan., will open a hardware store here in the near future.

Carr, Colo.—T. A. Paden has opened a hardware store.

Rockford, Ill.—J. A. Hollenbeck Hardware Co. is the title of a new firm recently organized to engage in the hardware business.

Starbuck, Wash.—Sprout & Barnhart Mercantile Co. has been incorporated with a capital stock of $20,000 to engage in the hardware business.

BUSINESS CHANGES.

Gainesville, Fla.—S. J. Gun, C. W. Sproull and T. W. Shands have purchased the S. J. Thomas Co. The busi-

ness will be continued under the name of the Gainesville Hardware Co.

Reidsville, N. C.—Geo. A. Miller has purchased the business of the Giles-Montgomery Hardware Co.

Spencer, Wis.—G. W. Wendell has purchased the hardware business of C. M. Varney.

Fenville, Mich.—Meecham & Fuller have sold their hardware business to Henry Lamb.

Hickory, N. C.—Lyerly Bros. have purchased the Shuford Hardware Co.'s stock.

Shelbyville, Ill.—Benjamin Buzzard has sold his hardware stock to W. E. Hart.

Advance, Ind.—C. C. Bowman has purchased a third interest in the hardware business of Ailes & Caldwell. In the future the firm will be known as the Advance Hardware Co.

Haynes, N. D.—A. I. Anderson has purchased an interest in the Haynes Hardware Co.

Barron, Wis.—John Post has sold his hardware business to J. W. Heffner.

Washington, Kan.—Thompson Bros. succeed Samuel Barney in the hardware business.

LeClaire, Ia.—C. F. Graham has sold his hardware business to J. W. Suiter.

Sedalia, Mo.—J. L. Kautzman and E. H. Weinrich have purchased the hardware business of R. R. Dunn.

Jefferson, Ia.—C. L. Smith has succeeded to the hardware business of Chas. Bobfink.

MISCELLANEOUS.

Burlington, Kan.—J. H. Sheldon has moved his hardware, stove and tinware stock into new quarters.

Woodstock, Ia.—W. A. Jones, hardware dealer, has suffered a loss due to fire.

Cassville, Mo.—The hardware store here was burglarized.

Wyoming, N. Y.—F. R. Tillotson has just completed a new store building 30x60 feet. Mr. Tillotson suffered the loss of his hardware store by fire some months ago.

Berkley, Va.—W. M. Tilley & Co., hardware dealers, suffered a loss due to fire.

Abingdon, Ill.—The hardware store of J. M. Bolton was damaged by fire.

Bad Axe, Mich.—John Maywood, hardware dealer, is reported to have filed a voluntary petition in bankruptcy.

Houston, Tex.—F. A. Heitman has purchased a three-story building on Main street immediately adjoining his present site, and is having the building remodeled and fitted to the demands of his hardware business.

Lecompte, La.—E. W. Wiley is erecting a new hardware store 35x90 feet at the corner of Water and Union streets.

Rock Island, Ill.—Allen & Meyers Hardware Co. suffered a loss due to fire.

Brownsville, Tex.—P. J. Vivier, hardware dealer, is erecting a two-story building 100x100 feet. The building will be of pressed brick and will cost about $25,000.

Reading, Pa.—The Stichter Hardware Co. is erecting a four-story fire-proof building on the site of the firm's former store on Penn street, above Fifth. The building will be finished about March 1.

Kalamazoo, Mich.—The Edwards & Chamberlin Hardware Co. has been reorganized, owing to the death of Wm. D. Edwards. Harry C. Howard was appointed to take Mr. Edwards' place as a director of the company.

OBITUARY.

George W. Corbin.

George Waldo Corbin, president of the Corbin Bros. Co., manufacturers of locks and hardware specialties, New Britain, Conn., died on November 30 at his home in New Britain. For some months past he had been suffering from an affliction of a serious character, but latterly it was thought he was on the road to recovery. He was a man possessed of a genial disposition and a strong personality and was very prominently connected with the industrial life of New Britain. During the past year he had organized two enterprises—Corbin Bros. Co., of which he was president, and the Dean Steel Die Co., of which he was treasurer. He was also the treasurer of the Corbin-Church Co. Mr. Corbin was born in New Britain in 1859 and was a nephew of Philip Corbin, president of the American Hardware Corporation. After he left school he entered the firm of P. & F. Corbin, holding the position of timekeeper, and remained with that concern until 1880 when he connected himself with the Corbin Cabinet Lock Co. For years he managed the affairs of the Corbin Cabinet Lock Co., but last May he severed his connection with that concern. Owing to his large interest in the Union Mfg. Co. of New Britain, man-

George W. Corbin.

ufacturers of drill chucks, he was elected president of that concern, which is one of the most prosperous manufacturing plants in New Britain. Mr. Corbin was also connected with a number of financial institutions in his home town. He was president of the People's Savings Bank, director of the New Britain Savings and Loan Association, trustee of the New Britain Trust Co. and director of the New Britain Realty Co. The deceased was very prominent in the political life of New Britain, and was elected mayor of that city in 1894. He was a thirty-third degree Mason and was very prominently connected with various fraternal organizations. In the death of Mr. Corbin the trade has lost a man of remarkable business attainments. He was possessed of twentieth-century business ideas and carried them out to their fullest scope. His magnetic disposition won him friends at all times and in all places. He is survived by a wife and four daughters.

Advertising Department

Our readers are invited to send in copies of their advertisements in the local press for criticism. All communications should be addressed to the "Advertising Department" of THE AMERICAN ARTISAN.

The advertisement of I. G. Froud of Springfield, Ill., is in some respects a good one, in others not so good. The text bears evidence of careful preparation,

DOES YOUR ROOF LEAK?

Do You Need Roofing?

IF SO, USE MASTIC ROOFING

Very Strong, Made on Heavy Jute Canvas Embedded in Mastic

Mastic is not a paper roofing, therefore does not require paint. It is extensively used on flat and steep roofs; also in place of and over old shingles. Best all purpose roof on the market. Write or 'phone for prices, samples and references. Repair work and roof painting attended to promptly.

I. G. FROUD

Wholesale and Retail Dealer. Both Phones 709
We have moved to Ninth and Monroe. Old Aetna Foundry Building.

but the ad presents a congested appearance. The first line of the ad could easily have been omitted, for the second one is forcible enough to set forth the necessity for the use of good roofing. Moreover, more space would then have been provided so that there would not be so much evidence of crowding. The ad appeared in the *Springfield* (Ill.) *State Register* of a recent date and occupied 3¾ inches of space, two columns wide.

* * *

Guns form the subject of a very good advertisement of F. H. Woodworth & Co., Chattanooga, Tenn. The

GUNS

Remington	Hammer Guns	$20.00 to $25.00
Remington	Hammerless Guns	25.00 to 50.00
Parker	Hammerless Guns (Only)	37.50 to 65.00
L. C. Smith	Hammer Guns	22.50 to 35.00
L. C. Smith	Hammerless Guns	25.00 to 75.00
Tobin	Hammerless Guns (Only)	25.00 to 37.50
Hopkins & Allen	Hammerless Guns (Only)	18.75 to 25.00
Stevens	Hammer Guns	12.50 to 25.00
Stevens	Hammerless Guns	20.00 to 25.00
Fox	Hammerless Guns (Only)	35.00 to 50.00

We mention above just some few makes of Guns we carry in stock. We have others, and can suit the most fastidious consumer, both in price and selection.

If you are not ready to buy just now, come in and make your selection anyway, and have us put the gun aside for you—

"WE'LL DO IT."

F. H. Woodworth & Co. 712 MARKET ST.

"THE UP-TO-DATE HARDWARE STORE."

ad in general has been set up in good form, the type selections are satisfactory, and the display feature is a strong one. The use of monkey dashes instead of leaders before the lines in the center of the ad describing the guns advertised, is, however, a feature which tends to detract somewhat from the appearance of the ad. Since leaders have been used so largely they should have been used exclusively for the purpose which they intend to serve. This, however, is but a minor criticism, and apart from the sloppy rule around the ad there is very little reason for adverse criticism. Mitred rules should always be used when rules are necessary at all. The ad appeared in the *Chattanooga* (Tenn.) *News* of November 21 and took up 10 inches of space, four columns wide.

* * *

The advertisement of Crane & Lockwood of Binghamton, N. Y., is neat and attractive. While not pretentious, it nevertheless can be relied on to produce good results. Crane & Lockwood in simple and concise language state two facts relative to furnace heat-

Do You Need a New HEATING PLANT?

We have eight different kinds

DOES YOUR OLD FURNACE NEED REPAIRING?

We have the best mechanics at lowest prices.

Crane & Lockwood

121 COURT STREET

ing that should be the means of bringing them business, namely, that they have eight different kinds of heating plants and that they have the best mechanics at lowest prices for repair work. Their ad appeared in the *Binghamton Press* of October 23 and took up 4¾ inches of space, one column wide.

* * *

A young married woman entered a hardware store and asked: "Have you got those things for improving a gas light?"

"Yes, madam," said the dealer. "Here is a complete set, fittings, chimney and mantle——"

"Oh, I don't care for the set," said the woman. "I've got the mantle part and the chimney, but the little white shirt is busted; that's the only part I want."

Heating and Ventilating

DRY CLOSETS IN SCHOOL BUILDINGS.

To THE AMERICAN ARTISAN:

Goedecke & Jones of Knapp, Wis., asked the readers of THE AMERICAN ARTISAN last week what they knew regarding the dry closet system, and whether that system was generally satisfactory.

Where a building for dry closets is erected separate and apart from the school building and a fire is run constantly to dry the excrement, it may be reasonably satisfactory. But if there is a water supply and sewers, we would not think of using the dry closet system, and in no case should the closets be in the school building.

A TINNER.

Chicago, Dec. 2, 1908.

WROUGHT STEEL REGISTERS OF TUTTLE & BAILEY MFG. CO.

Tuttle & Bailey Mfg. Co., New York, Chicago and Boston, are now introducing self-locking, glide-movement, wrought steel registers and faces, together with a line of new semi-steel goods, which are made in their own factory and under their exclusive patents. The company state that their wrought steel registers are achieving a marked degree of popularity among the trade, and that the demand for them is increasing all the while. They keep on hand a complete stock of all sizes, and they request the trade to send for descriptive literature. When writing for same, kindly mention THE AMERICAN ARTISAN.

Floor or Wall Wrought Steel Register.

"IDEAL" SECTIONAL BOILERS.

A recent catalogue of the American Radiator Co., 282-286 Michigan avenue, Chicago, is given up to a description of "Ideal" sectional boilers for steam and water. The book contains 32 pages, and is very handsomely printed in three colors. It shows those latest types only of "Ideal" sectional boilers which recent tests have conclusively demonstrated to be superior in evaporative power. The tests were made both in comparison with the earlier types of "Ideal" sectional boilers and with every other make of boiler of any market standing, the tests proving, according to the American Radiator Co., that "Ideal" boilers are unexcelled by others. The proper quantity of water per square foot of heating surface is an important feature developed by experiment and embodied in "Ideal" boilers. It has been proven that the transmission of heat from the fire-box of a boiler to the water increases with the temperature difference between the fire and the water surrounding. The American Radiator Co.'s standard for rating steam boilers not having the special care of a fireman, is that two pounds pressure shall be maintained for eight hours without attention, starting with a full fuel charge. "Ideal" boilers have a close-fitting smoke-pipe damper. After the house has attained the normal temperature the draft should be regulated by this damper to maintain the required heat—and no more. These boilers, with their large percentage of direct heating surface, will then keep the radiation warm with much less fuel than will the boilers with a large percentage of flue surface, according to the American Radiator Co. "Ideal" boilers are so proportioned as to present directly to the fire a large percentage of live heating surface. The "Ideal" Sylphon Regulator, supplied with "Ideal" steam boilers, is said to be a vast improvement over the old regulator containing a rubber diaphragm. It is said to be so sensitive that the slightest change in pressure will affect the position of the boiler dampers, it being easily possible to hold the temperature of the steam at atmospheric pressure for hours without attention. When writing the American Radiator Co. for catalogue descriptive of these boilers, kindly mention THE AMERICAN ARTISAN.

THE "CROWN" WARM AIR FURNACE.

The low-down "Crown" warm-air furnace, manufactured by the March-Brownback Stove Co., Pottstown, Pa., is becoming more and more popular among furnace dealers, the makers say. The various parts of this furnace are thick and staunch, and the maximum amount of heat is said to be obtained from the minimum amount of fuel consumed. The "Crown" furnace is modeled upon scientific lines and is, what may be termed, a first-class furnace in every respect. The March-Brownback Stove Co. in placing this furnace upon the market have realized the importance of constructing a furnace which will not only perform its heating functions in an admirable manner, but will do so with a minimum amount of cost and attention. Descriptive literature may be had for the asking. When writing kindly mention THE AMERICAN ARTISAN.

PARAGRAPHS.

Osborne, Rea & Co. of New York City have been incorporated with a capital stock of $10,000 to manufacture heating and ventilating apparatus, etc. The incorporators are Chas. T. Osborne, Chas. R. Wight and Daniel R. Rea.

Chas. Smith, president of the Chas. Smith Company, manufacturers of Hero furnaces, Chicago, was elected commander of Geo. G. Meade Post 444, G. A. R., without opposition at the annual election, December 1. This is one of the few posts that own their building and have a revenue from it to help in the relief of destitute comrades. Commander Smith served in the Vicksburg, Red River and Mobile campaigns as a private in the 96th Ohio Volunteer Infantry.

"There are three winners in trade," remarked an old Hardwareman: "Right prices. Good assorted stock. Promptness of dispatch."

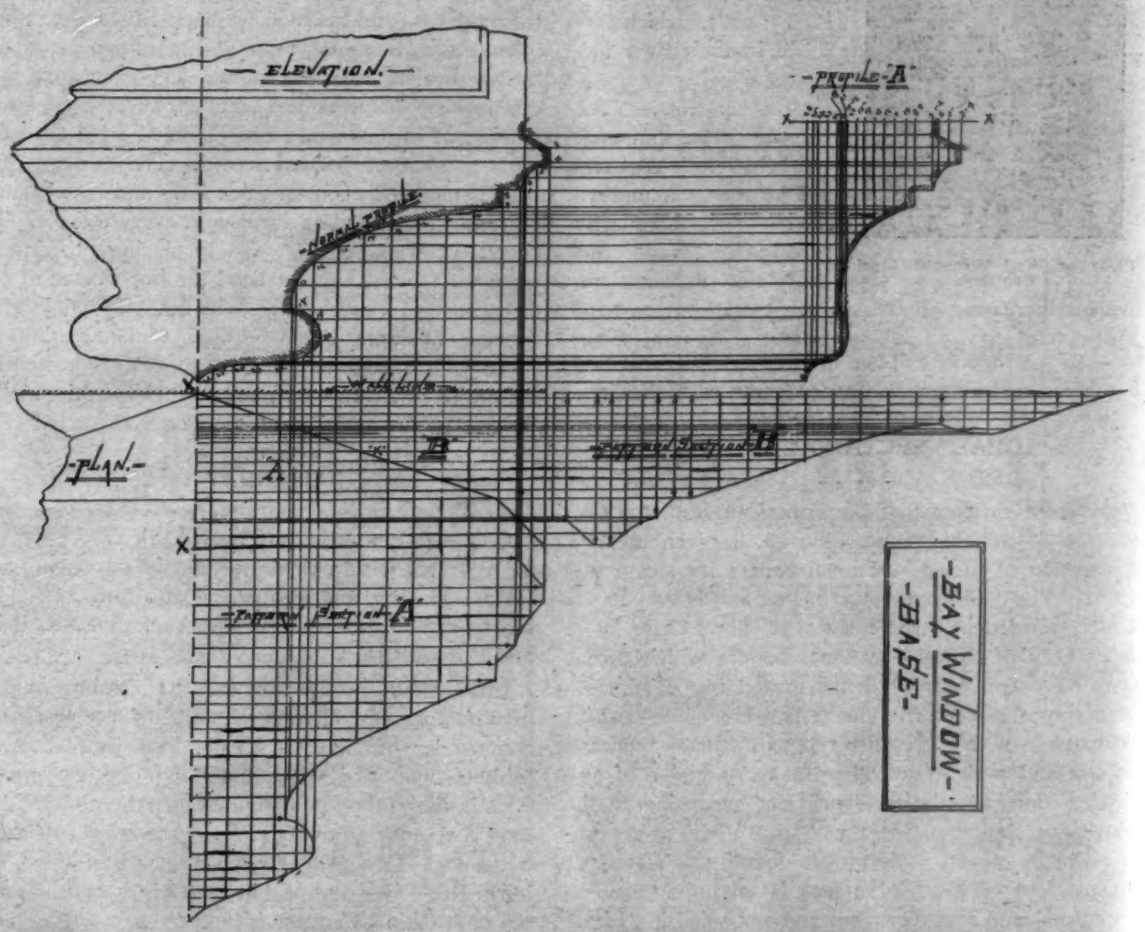
Tinshop

THE PUBLISHER IS PLEASED TO ANNOUNCE THAT THE AMERICAN ARTISAN WILL BE SENT FREE OF CHARGE FOR THE REMAINDER OF 1908 TO NEW SUBSCRIBERS FOR THE YEAR 1909. YEARLY SUBSCRIPTIONS SENT NOW WILL BE CREDITED TO THE END OF 1909.

SQUARE BAY WINDOW BASE.

BY G. L. GRAY.

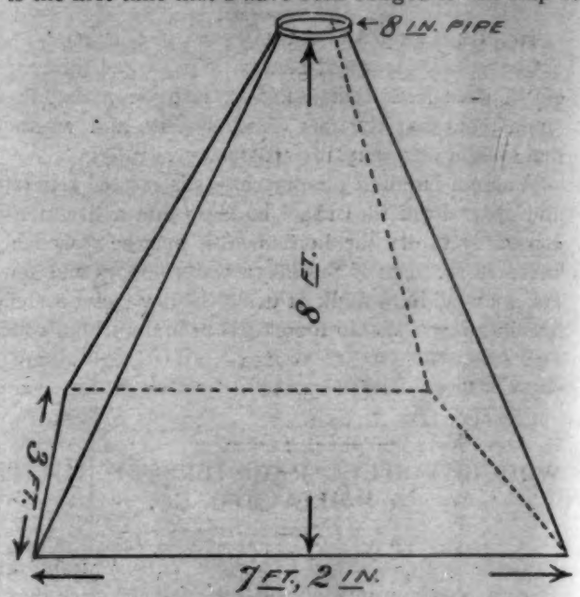
This method can be applied to any size or shape providing same is similar in plan. In this case we have the normal profile in the elevation which is also the true profile of section "B"; divide the normal profile in any number of parts and draw same down through section "B" to miter line from these points of intersection, draw parallel lines through section "A." Next project the points in normal profile to right as shown, take the points of intersection on line XX in plan and place same parallel to the aforesaid projected lines as shown; from these points draw lines down until they intersect corresponding lines making the true profile for section "A"; take the stretchout of profile "A" and place same with parallel line under section "A" as shown, drop the points of intersection in miter line K in plan down until they intersect corresponding lines in stretchout, and this will give the pattern for section "A". Do the same with stretchout of normal profile by placing same opposite to section "B," obtaining pattern for "B."



WANTED: A HOOD FOR A RANGE.

TO THE AMERICAN ARTISAN:

I have read many good things in your paper, but this is the first time that I have been obliged to ask help of your readers. I would like some one to show me how to make a hood that will successfully carry off the smoke and the greasy odor from a restaurant range. The range is 7 feet 2 inches long and 3 feet wide. The accompanying sketch shows the shape of one that I have made, but I do not seem to be able to get enough



Sketch of Hood Used Unsuccessfully.

draft. I have tried a 15-foot stack, but better draft is afforded with a short stack. I trust that some of the readers of THE AMERICAN ARTISAN will be able to help me out in this matter. W. S. PEDEN.

Altus, Okla., Nov. 26, 1908.

WHO CAN FURNISH THIS INFORMATION?

To THE AMERICAN ARTISAN:

We would like to learn through THE AMERICAN ARTISAN the best way to repair copper valleys. We have a church here that is slate roofed, and the copper valleys are 20 inches wide. These valleys are continually cracking and buckling, and cause a great deal of trouble by leaking. They are 25 or 30 feet long and good pitch. We thought at the time they were put in that they would last forever.

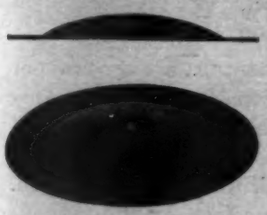
We trust that some of your readers will tell us how to successfully repair these copper valleys.

DRIGGS & JONES.

Clinton, Mo., December 2, 1908.

COPPER ROOFING CAPS OF C. G. HUSSEY & CO.

C. G. Hussey & Co., Pittsburg, Pa., have put on the market a line of new copper roofing caps, shown in the accompanying illustrations. These caps are being used in the laying of the better grades of roofing where long service is required. C. G. Hussey & Co. claim that roll roofing will withstand weather conditions better when fastened with these caps. Copper caps and nails are durable and offer no trouble in making the seams tight, the cap providing a large bearing. C. G. Hussey & Co. put up these copper roofing caps in 100-pound kegs and in 5 and 10-pound paper boxes for convenience. They will be pleased to quote prices. When writing for same kindly mention THE AMERICAN ARTISAN.



Copper Roofing Caps.

SKYLIGHTS OF THE CANTON ART METAL CO.

Architects, contractors and builders when seeking designs for skylights and ventilators will find it to their interest to consult the skylight catalogue of The Canton Art Metal Co., of Canton, O., in which are described the single pitch, double pitch, hipped style and hipped turret styles of skylights. The Canton Art Metal Co. state that they have incorporated in this branch of their products the same high standard of quality and workmanship characteristic of their celebrated steel ceilings and side walls. In the catalogue attention is called to the gutters in the sash bar and the holes in the metal curb. By means of these gutters all condensation is carried away from the glass and discharged through the weep holes onto the roof, so that it cannot drop down into the building. There is also illustrated in the catalogue the company's XL sash operator, which is a worm and gear device for either pivoted, top or bottom hung sash, for lanterns, ceiling lights, or transom sash, to be operated by a wheel and rod from below. This device is designed to be operated from a central power station, and will control 100 feet of the company's regular pivoted sash, or its equivalent in shorter runs, automatically locking and holding the same in any position. Considerable space in the catalogue is devoted to a description of Acorn and Burt ventilators. When writing for this catalogue, kindly mention THE AMERICAN ARTISAN.

BURT VENTILATORS.

By means of Burt ventilators, impure air, hot air, smoke, steam or gas may be taken out of any building automatically and without any expense other than the initial cost of the ventilators. The Burt Mfg. Co., 650 Main street, Akron, O., which manufacture these well-known ventilators, say that the stationary ventilator of the Burt type is the most practical and least expensive device for supplying fresh air to the interior of a building without lowering the temperature too far for comfort. These ventilators are so constructed that when most needed—which is during perfectly calm weather—they will draw the impure air from the interior of the building. Any movement of the outer air across the top of the ventilator causes an upward flow of air in the air tube, and the air that is next to the ceiling, the hottest air in the building, is drawn out. The Burt ventilator prevents any back current of air, it is said, and never becomes clogged with snow, ice or other substance, but remains free and open. One of the most important characterisics of the Burt glass-top ventilator is that it constitutes both a skylight and a ventilator. In many instances this makes unnecessary any other form of skylight. In disagreeable weather it is sometimes advisable to close a ventilator, in which case the Burt can be entirely closed without obstructing the passage of daylight through it. Burt ventilators are provided with patented sliding sleeve dampers which can be adjusted to any degree. The new 92-page catalogue of the Burt Mfg. Co. gives fine illustrations of mills, shops, factories and residences where Burt ventilators are in successful use. When writing the company kindly mention THE AMERICAN ARTISAN.

METAL INTERIOR DECORATIONS OF THE ELLER MFG. CO.

The Eller Mfg. Co., Canton, O., say that in their stamped steel ceilings and interior decorations, the modeler's skill has not only been directed to produce patterns which would please the eye, but to harmonize the classic arts and make lasting beauty. The use of stamped steel for the ceilings and sidewalls of a building not only enhances the beauty of the interior but being fire-proof it takes a low rate of insurance. It also does away with the dampness frequently caused by plaster. The Eller Mfg. Co. state that they employ experienced and able mechanics who take up the work on their metal interior decorations where the modeler leaves off, and who so arrange the dies that each will member properly with others, thereby producing close-fitting joints and reducing the cost of erecting, an essential item which buyers cannot afford to disregard. The Eller Mfg. Co. have recently issued catalogue No. 17 which they will be pleased to forward to those interested. When writing for it kindly mention THE AMERICAN ARTISAN.

"BROTHER BILL" WINDOW DISPLAYS.

The Pritchard-Strong Co., 25 Circle street, Rochester, N. Y., report that dealers all over the country are using their "Brother Bill" window display with excellent results, and that their actual life-size lithographed cut-out of "Brother Bill" enables dealers to get up an unusual and attractive window display at practically no expense. They report that their aggressive "Brother Bill" advertising campaign that they are now conducting is resulting in increased sales of "Prisco" Money-Back Metalware. Dealers who are anxious to increase their sales rapidly should not fail to write The Pritchard-Strong Co. for information that will enable them to obtain one of these big "Brother Bill" displays. When writing kindly mention THE AMERICAN ARTISAN.

NOTES AND QUERIES.

DETROIT MACHINE GAS RANGES.

From T. B. Stock & Co., Waukon, Iowa.

Where can we get Detroit Machine Gas Ranges?

Ans.—Detroit Heating & Lighting Co., Detroit, Mich.

AUTOMATIC GATES.

From the Gilbert Hardware Co., Dublin, Georgia.

Kindly give us the name of manufacturer of automatic gates.

Ans.—Eureka Fence Mfg. Co., Richmond, Ind.

NICKEL PLATING OUTFIT.

From Henry J. Arond, Omemee, N. D.

Where can I get a nickel plating outfit?

Ans.—Zucker & Levett & Loeb Co., 943 George street, Chicago.

RECIPE FOR BLUING MALLEABLE IRON.

From Geo. C. Bourne, Worcester, Massachusetts.

Kindly give me a recipe for bluing polished malleable iron.

Ans.—See pages 16 and 18 of THE AMERICAN ARTISAN'S "Manual of Receipts."

HAND MACHINE FOR BENDING ANGLE IRON.

From The C. A. Peck Hardware Co., Berlin, Wisconsin.

Where can we get a hand machine for bending angle iron?

Ans.—Commercial Mfg. Co., Cleveland, Ohio; Bertsch & Co., Cambridge City, Ind.; Wallace Supply Co., 19 Jefferson street, Chicago; Bicknell Mfg. & Supply Co., Janesville, Wis.; Niagara Machiene & Tool Works, Buffalo, N. Y.; J. M. Robinson Mfg. Co., Cincinnatti, Ohio.

ITEMS.

The Green Bay Cornice & Corrugating Co., Green Bay, Wis., is planning to erect a new building early in the year on a site newly acquired. The building will be 159x198 feet, of fireproof construction.

P. Mosheik, 421 S. Halsted St., Chicago, has put on the market a line of boilers which are said to be meeting with great success. These boilers are made in 48 styles to meet all the demands of the trade. P. Mosheik guarantees these boilers to be of high-grade quality and to last as long as any boilers now on the market. When writing for detailed information kindly mention THE AMERICAN ARTISAN.

At the recent meeting of the Master Sheet Metal Workers' Association of Brooklyn, N. Y., the question "Can Agitation Bring Protection to the Dealer?" was discussed. It appeared to be the general opinion that protection to the dealer will come through effective trade regulation.

The regular monthly meeting of the Master Sheet Metal Workers' Association of Milwaukee, Wis., was held in the Builders and Traders' Exchange Bldg., 456 Broadway, Milwaukee, on Dec. 2. Officers were nominated for the ensuing year and others important business was transacted.

At a meeting held on November 27 of the creditors of C. F. Dupper, head of the Ohio Tinware Co., Cincinnati, which was recently declared bankrupt, announcement was made that an offer had been made to creditors of 25 per cent in cash and 35 per cent in notes. The property is valued at about $15,000.

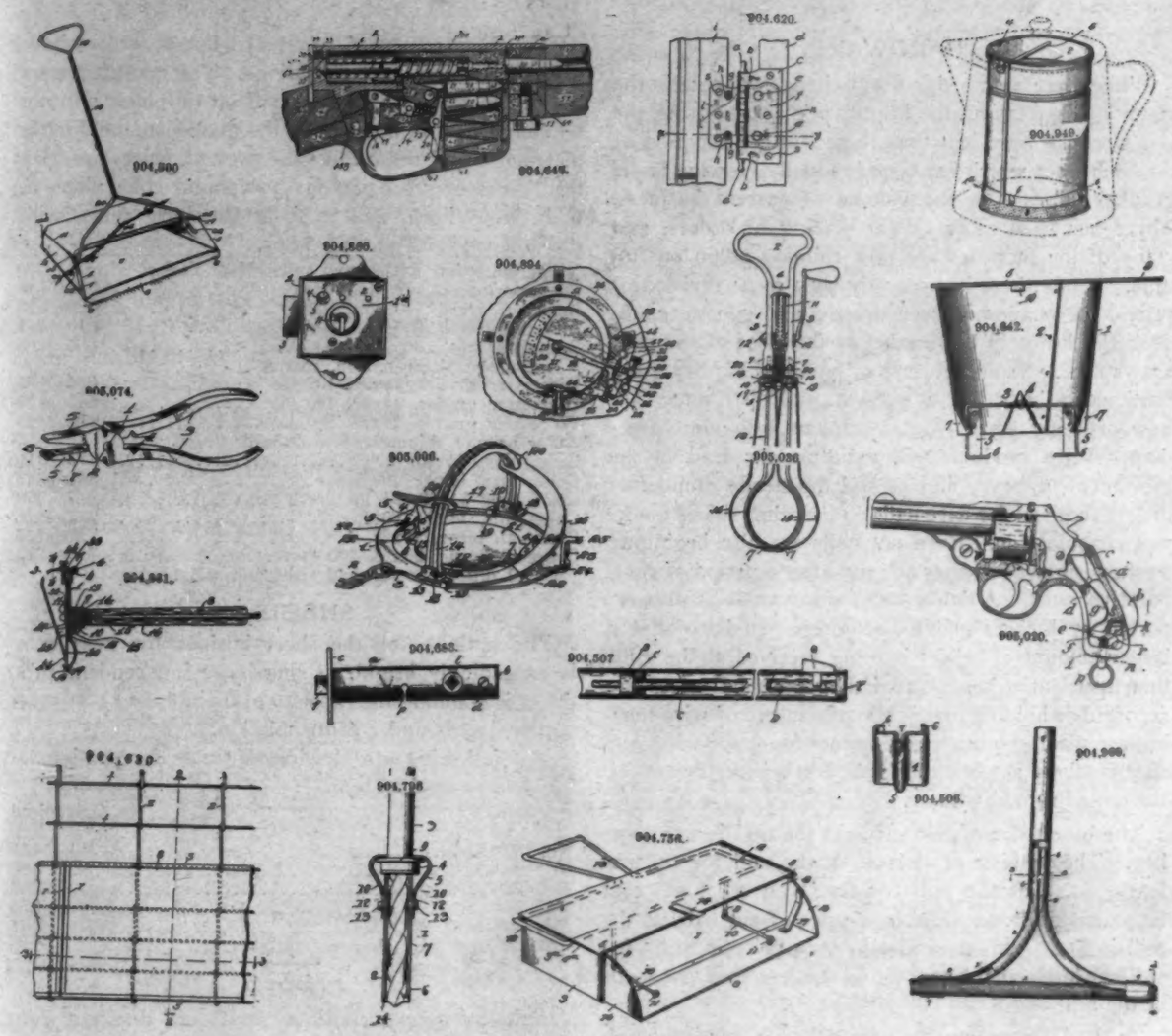
The P. H. Learner Co. of Kokomo, Ind., which manufactures cement machinery for ventilating chimneys, shingles, etc., has filed articles of incorporation with a capital stock of $20,000. The officers of the company are: President, Schuyler C. Rees; vice-president, John R. McIntosh; secretary-treasurer, P. H. Learner.

The Berger Mfg. Co., Canton, O., are sending out a blotter advertising their "Top Notcher" and "Tuscora" roofing plates, the former having a 40-pound coating and the latter a 25-pound. These plates are made in the old way, palm oil flux and hand dipped. The blotter is printed in three colors and is an unusually attractive one.

The American School of Correspondence, Chicago, announce through their advertisement in this issue that they are prepared to give a complete course in sheet metal work, and technical training along other lines. They are sending free a 200-page bulletin of engineering information to those who will fill out the coupon appearing in connection with their advertisement and mail it to them. The book describes the complete courses of the American School of Correspondence. When writing kindly mention THE AMERICAN ARTISAN.

Otto Goebel, 523 Columbus Ave., Syracuse, N. Y., secretary of the National Association of Master Sheet Metal Workers, has sent out a circular letter to all locals affiliated with the national association in which he states that he is anxious to get a full and complete list of all the individual members of the national association, whether in good standing or not, so that he may be able to gather them under the names of their respective locals in a card index system with such statistics as he had reason to believe will be valuable to the furtherance of the cause of the national and local associations and for the interests of the individual member. On the back of the letter that Secretary Goebel has sent out is a form which he requests that members fill out to be forwarded to him so that he may complete the roll and compile the statistics and thus have everything in a card index system from which it may be possible to answer the inquiries which reach him from time to time.

NEW PATENTS.



904,500—Dust Pan. William A. Babbitt and Oren R. Hanchett, Lockport, N. Y., assignors to the Lockport Stamping Company, Lockport, N. Y. Filed March 21, 1908. Serial No. 422,554.

904,506—Wire Fastener. Alfred W. Burbury, Woodbury, Tasmania, Australia. Filed Dec. 31, 1906. Serial No. 350,284.

904,507—Air Gun. William J. Burrows, Plymouth, Mich., assignor to Daisy Manufacturing Company, Plymouth, Mich., a corporation of Michigan. Filed March 28, 1908. Serial No. 423,950.

904,620—Door Hinge. Van Dorn Kiple, West Union, Ia. Filed Feb. 13, 1908. Serial No. 415,793.

904,630—Fence. George A. Masters, Chicago, Ill. Filed Oct. 26, 1906. Serial No. 340,632.

904,642—Heater. Josephus C. Plank and Thomas E. Fulghum, Grand Junction, Colo. Filed June 18, 1908. Serial No. 439,214.

904,646—Automatic Firearm. Carl L. H. Prinke, Baltimore, Md. Filed April 27, 1908. Serial No. 429,363.

904,683—Lock for Doors, Cupboards and the Like. Henry J. Cowell, Adelaide, South Australia, Australia. Filed Sept. 7, 1904. Serial No. 223,592.

904,756—Ash Scoop. Robert B. Clement, Crayne, Ky., assignor of one-fourth to Thomas H. Cochran and one-fourth to William D. Crowell, Marion, Ky. Filed April 14, 1908. Serial No. 427,075.

904,796—Auger. John Moore, East Liverpool, Ohio, assignor of one-half to A. L. Prier, East Liverpool, Ohio. Filed April 27, 1908. Serial No. 429,443.

904,860—Lock. James R. Fletcher, Stamford, Conn., assignor to the Yale & Towne Manufacturing Company, Stamford, Conn. Filed April 29, 1908. Serial No. 429,849.

904,861—Safety Razor Frame. Benno Gallinek, New York, N. Y. Filed Jan. 9, 1908. Serial No. 409,897.

904,894—Damper Regulator. William Roberts and Dellford H. Holloway, Waterford, N. Y., assignors of one-third to Charles W. Scoville, Cohoes, N. Y. Filed Sept. 11, 1907. Serial No. 392,268.

904,949—Attachment for Coffee Pots and the Like. Thomas R. Gracie, Pittsburg, Pa. Filed Aug. 14, 1908. Serial No. 448,542.

904,969—Lightninng Rod. George R. Kress, Pittsburg, Pa. Filed Feb. 6, 1908. Serial No. 414,523.

905,006—Animal Trap. William Sebelin, Sunfield, Idaho. Filed April 9, 1908. Serial No. 426,120.

905,020—Safety Lock for Revolvers, Pistols or the Like. Joseph Tambour, Nanterre, near Paris, France. Filed April 23, 1908. Serial No. 428,866.

905,036—Egg and Other Beater. Harlan P. Wells, Amesbury, Mass. Filed June 1, 1908. Serial No. 436,184.

905,074—Pliers. Charles Hiller, St. Louis, Mo. Filed May 14, 1908. Serial No. 432,774.

Trade Report.

HARDWARE.

While there are no significant changes to note in the conditions governing the hardware market during the last week, it is evident that there is a continuation of the confidence which has been gradually growing and a gradual increase in the volume of current business. There has been more liberal placing of orders, and many of the factories are now running again on full time. While there has recently been some revision of prices, they have not been drastic, and general confidence is shown in the market as the close of the year draws near. Manufacturers of builders' hardware are particularly busy just at present, and distributors are now ordering stocks for assortment with more freedom. Wire products still maintain the lead in the movement of heavy staples and the steady number of orders received for wire nails and fencing shows a normal consumption. Even cut nails are also beginning to show signs of greater activity after a period of comparative quiet. A fairly satisfactory trade is also reported by jobbers in holiday goods. In barb wire a larger amount of orders is being received at the mills than usual at this season of the year, and prices are reported as holding firm. Manufacturers of wire fencing are placing quite liberal orders for fence wire, and specifications against contracts are being received by the mills in good volume.

The base price of wire nails at the mill is $1.95 per keg. The jobbing price is $2 at the mill for full car loads, $2.10 at the mill for less than car loads and $2.40 out of store. The base price of cut nails at the mill is $1.80 per keg. The jobbing price is $1.85 for full car loads at the mill, $1.95 for less than car loads at the mill and $2.25 out of store.

In the Chicago market wire nails are quoted as follows: Wire nails, jobbers' car load lots, $1.95; retailers' car load lots, $2; painted barb wire, jobbers' car load lots, $2.10; retailers' car load lots, $2.15, with 30 cents for galvanizing; plain wire to jobber in car lots, $1.80, and to retailers in car lots, $1.85.

Coil chain, trace chain, cow ties and German pattern coil chain are now quoted at unusually low prices. A reduction in price of 7½ per cent has taken place in shovels of the third and fourth grade. The better grades have been reduced 5 per cent. Irregularity has recently been characteristic of the shovel market.

TIN PLATE.

The tin plate trade is reviving. The American Sheet & Tin Plate Co. has closed a five-year contract with the American Can Co. to supply it with plates. No figures could be secured on the tonnage and the price a box is unknown, although it is surmised that it is on a sliding base for the five years. One estimate is that the American Can Co. will take at least 65 per cent of the output of the American Sheet & Tin Plate Co., but this seems too large. The Greer plant at New Castle, Pa., has been placed in readiness to resume and $60,000 has been expended in repairs, but no orders have been received to start operations. The manufacturers are of the opinion that the tariff on tin plates will not be changed. As a result of the good demand for tin plates at an off season like the present, prices are very firm. Prices are $3.89 for 100-pound coke plates f. o. b. New York, and $3.70 at Pittsburg mills, with the independents quoting $3.65.

Am. coke tins, I. C., from store, New York:	
Bessemer steel, 107 lbs., 14x20	$4.35@4.40
Bessemer steel, 100 lbs., 14x20	4.20@4.25
Bessemer steel, 95 lbs., 14x20	4.10@4.15
Bessemer steel, 90 lbs., 14x20	4.00@4.05
Am. charcoal terne, 8-lb. coating:	
Worcester grades, 14x20, 107 lbs	4.30@4.35
Worcester grades, 14x20, 100 lbs	4.15@4.20
Worcester grades, 20x28, 200 lbs	8.05@8.10
For prompt shipment, f. o. b. mill:	
Coke, tins, 14x20, I. C	3.85@3.90
Coke, tins, 14x20, 100 lbs	3.70@3.75
Coke, tins, 14x20, 95 lbs	3.65@3.70
Coke, tins, 14x20, 90 lbs	3.60@3.65
Charcoal, terne, 20x28, I. C	7.30@7.35
Charcoal, terne, 20x28, 200 lbs	7.00@7.05

Usual difference for odd sizes and weights.

SHEETS.

The outlook for the sheet busines for next year is exceedingly bright, as one large independent producer is doubling the capacity of its mill, and a $1,500,000 project is under contemplation.

The following are New York prices for 500-bundle lots and over, f. o. b. mill:

	Galvanized Net.
No. 30	$4.05
No. 29	3.80
No. 28	3.65
No. 27	3.35
Nos. 25 and 26	3.15
Nos. 22 and 24	2.95

COPPER.

Sales of copper continue small and domestic consumers remain out of the market. They have covered their actual requirements during the balance of the year and their recent experience of too heavy buying has encouraged them to hold off. Foreign consumers also are not buying anything of importance. Purchases for export have fallen to practically nothing and a resumption of buying is not anticipated until next month. Copper can be purchased on the basis of 14¼ cents for electrolytic, but many large producers and selling agents are holding the metal at 14½ cents. It is generally believed that a concession would result in a large increase in sales. Stocks of copper in Europe are giving producers some concern as large offerings of speculative copper are made on every advance in prices. It is expected the next six months will reduce foreign stocks to a more reasonable figure. Production continues the heaviest in the history of the trade and consumption is not more than 75 per cent of the normal.

Extreme fluctuations for this year:

	Highest.	Lowest.
Lake copper, spot	14½	12⅜
Electrolytic copper, spot	14⅝	12¼
Casting copper, spot	14¼	12½
London, spot	£64 17 6	£56 5 0
London, futures	65 15 0	56 17 6
London, best selected	68 10 0	60 0 0

PIG IRON.

Business generally continues along conservative lines in the market for pig iron, and consumers who have completed their requirements are inclined to await the result of the blowing in of idle capacity which may result in modifying the recent advance in prices, which has ranged $1 to $2 for all kinds of iron in all sections. Recent business, especially in the East, has been confined to the placing of small lots of foundry, forge and basis grades, but there is a fair tonnage under negotiation with malleable founders, jobbing gray iron founders, railroad equipment, plants and machinery manufacturers. Most of the stove founders have covered requirements for the first quarter of next year, but a few new orders have been placed during the last week. In the Chicago district it is generally believed that the melters have covered their requirements as far ahead and to as great an extent as business prospects warrant. Improvement is shown as compared with the early summer buying, but the total is considerably short of what will be required when the full capacity is being operated. For prompt shipment $17 delivered can be done, while $17 furnace can be obtained the first quarter delivery.

CHICAGO MARKET.

Lake Superior charcoal	$20.00@20.50
Northern foundry No. 1	18.00@18.50
Northern foundry No. 2	17.50@18.00
Northern foundry No. 3	17.00@17.50
Southern foundry No. 1	17.85@18.35
Southern foundry No. 2	17.35@17.85
Southern foundry No. 3	16.85@17.35
Southern foundry No. 4	16.35@16.85
Southern No. 1, soft	17.85@18.35
Southern No. 2, soft	17.35@17.85
Southern Gray forge	15.60@16.10
Southern mottled	15.35@15.60

PITTSBURG MARKET.

No. 1 foundry	$16.90@17.15
No. 2 foundry	16.25@16.90
Gray forge	15.40@15.90
Bessemer	17.40@17.90
Basic	16.40@16.90

BIRMINGHAM MARKET.

No. 1 foundry	13.50@13.75
No. 1 soft	13.50@13.75
No. 2 foundry	13.00@13.25
No. 2 soft	13.00@13.25

Matthew Addy & Co., Cincinnati, will say in their weekly report: "The past week has seen a comparatively quiet market, but this was rather to have been expected after the recent buying movement and considering the time of year. During the early part of November consumers were not at all backward in covering their requirements for the balance of the present year and the first half of next, and even a number of those who did not know exactly what they would need caught the spirit of the thing and did their share of the buying. Now that the breathing spell has come people are taking their time to look around and investigate carefully before deciding to do anything, and purchases are being made with circumspect care. Then, too, as we approach the first of the year, which is almost universally the time for taking inventory, buying is naturally of a less volume. However, the recent advance in both northern and southern irons is being well maintained and furnace men seem satisfied with what they have done and are optimistic over future prospects. They are not worrying over the fact that things have quieted down, accepting the situation as the expected one in the natural order of events. Several of the large producers in the south have practically withdrawn their product from the market and a number of others are not willing to sell for delivery beyond the first quarter of next year. The northern furnace men are not quite so conservative and most of them will sell for the entire first half. Generally inquiries that are being sent out are for requirements over the first six months of 1909. The fact that there is so little demand for spot iron indicates that every one is covered for the present. Inquiries that are current are divided almost equally among foundry, basic and Bessemer grades.

"In summing up we can only say that the expected has happened; things are quiet, but the tone is healthy and the prospects are bright."

Rogers, Brown & Co., Cincinnati, will say in their weekly report: "Buying during the week has been most satisfactory and in excellent volume, the week closing with large tonnage. There is not the eager attitude manifested right now that has been in evidence during the recent past, this now having transferred itself to other lines. Structural steel and car orders are more in evidence and the demand for railroad equipment is better than any time since the opening of the year. A large tonnage in rails is being held up on account of the controversy between the mills and railroads over the rolling specifications. This amount is estimated at 500,000 tons now in negotiations which it is presumed will be closed by the first of the year.

"Prices are firm and strong, with very little range on the part of different sellers. The furnaces are generally well sold up for the first quarter and it is expected that a brisk movement for second quarter shipment will soon be heard from. Production generally is increasing and stock on furnace yards is decreasing, which shows an excellent percentage of improvement in melt.

"Coke is firm, the ovens are getting out a satisfactory tonnage, and shipments are moving freely. There are some good inquiries in the market and prices are being maintained. A large item to be considered during the winter months will be the lack of workmen in the various coke fields. This is more noticeable when it is known that in the Connellsville districts, when running full, there are some 38,000 mine and coke workers, where at present not more than 20,000 are employed, as the majority of those who became idle about a year ago have not returned from their exodus to foreign countries. It is firmly believed that prices on furnace and foundry coke will be advanced before the first of the year."

SEEDS.

The Leonard Seed Co. says in its weekly report:

"It is likely that for the next week or two the seed department of the average general store will be somewhat lost sight of in the Christmas rush, for seeds do not cut much figure as Christmas gifts. Immediately after the holidays, however, seeds will demand attention and a replenishing of stock will cause a rush for all standard varieties.

"The prospect for a good spring trade is bright. Reports from all sections indicate that the country merchant is alive to the situation and in a position to take advantage of it. Early orders in most cases can be filled without trouble, but the short placing of advance orders, which was the rule this year, will have to be made up for, consequently the demand will be greater than usual, and with a not overabundant stock in the hands of the distributor, the later orders of the dealers will not be so easy to fill. The situation from the distributor's standpoint is all that could be desired. There is no chance for any slump in prices. The quality of the seed product of 1908 is first class. No great quantity of stock has been carried over by the general merchant; the planting of seeds will be larger than ever and a steady advance in values is looked for.

"Being now in a position to name prices, we are advising our customers to make their wants known, so that when the seed planting season comes they will be ready for it.

"Onion sets are in sharp demand at prices ranging some 10 to 15 cents per bushel higher than a week ago. Flower seeds seem to be in fair supply. Some of the varieties that were quite scarce last season are offered freely and at somewhat reduced prices. Field corn and all varieties of grain will be in fair supply at prices about on a par with last year. Grass seeds rule firm with small change in value over the past week."

Current Hardware and Metal Prices.

THE AMERICAN ARTISAN AND HARDWARE RECORD is the only publication containing western hardware and metal prices corrected weekly.

METALS.

FIRST QUALITY BRIGHT PLATES.

		Per Box.
IC	14x20	$6 40
IX	14x20	7 45
IXX	14x20	8 60
IXXX	14x20	9 85
IXXXX	14x20	11 00
IC	20x28	13 70
IX	20x28	15 70
IXX	20x28	18 15
IXXX	20x28	20 55
IXXXX	20x28	22 95

COKE PLATES.

Cokes, 180 lbs	IC	20x28	$ 8 5
Cokes, 200 lbs	IC	20x28	9 00
Cokes, 216 lbs	IC	20x28	9 50
Cokes, 270 lbs	IX	20x28	11 25

PIG IRON.

North'n Fdy., No. 1	$18 00@$18 50
North'n Fdy., No. 2	17 50@ 18 00
North'n Fdy., No. 3	17 00@ 17 50
Southern Fdy., No. 1	17 85@ 18 35
Southern Fdy., No. 2	17 35@ 17 85
Southern Fdy., No. 3	16 35@ 16 85
Southern Fdy., No. 4	16 35@ 16 85
Southern No. 1 Soft	17 85@ 18 35
Southern No. 2 Soft	17 35@ 17 85
Southern Gray Forge	15 60@ 16 10
Southern Mottled	15 35@ 15 60
Lake Sup. Charcoal	20 00@ 20 50
Southern Silveries, 4% Silicon	17 85@ 18 35
Southern Silveries, 5% Silicon	18 35@ 18 85
Southern Silveries, 6% Silicon	18 85@ 19 35
Jackson Co. Silveries, 6 per cent	19 90
Jackson Co. Silveries, 8 per cent	20 40@ 20 90
Jackson Co. Silveries, 10 per cent	21 90
Malleable Bessemer	17 00@ 17 50
Standard Bessemer	17 65@ 18 15
Alabama Basic	16 85@ 17 35

BLACK STEEL SHEETS.

No. 12 per 100 lbs.	$2 20@$2 30
No. 14 per 100 lbs.	2 25@ 2 35
No. 16 per 100 lbs.	2 35@ 2 45
Nos. 18-20 per 100 lbs.	2 60@ 2 65
Nos. 22-24 per 100 lbs.	2 65@ 2 70
No. 26 per 100 lbs.	2 70@ 2 75
No 27 per 100 lbs.	2 75@ 2 80
No 28 per 100 lbs.	2 85@ 2 95

GALVANIZED

No. 10 per 100 lbs.	$3 05@$3 10
Nos. 12-14 per 100 lbs.	3 05@ 3 10
No. 16 per 100 lbs.	3 05@ 3 10
Nos. 18-20 per 100 lbs.	3 15@ 3 25
Nos. 22-24 per 100 lbs.	3 30@ 3 35
No. 26 per 100 lbs.	3 50@ 3 55
No. 27 per 100 lbs.	3 70@ 3 75
No. 28 per 100 lbs.	3 90@ 4 00

POLISHED SHEET STEEL.

No. 24 per 100 lbs	$4 90
No. 26 per 100 lbs.	5 00
No. 27 per 100 lbs.	5 10
No. 28 per 100 lbs.	5 20

SMOOTH STEEL.

Wood's Smooth, No. 20	$3 05
" " No. 22-24	3 10
" " No. 25-26	3 15
" " No. 27	3 20
" " No. 28	3 30

PATENT PLANISHED SHEET IRON.

Patent Planished Sheet Iron, "A" $10.20, "B" $9 20

PATENT PLANISHED SHEET STEEL.

Dickey Planished Sheet Steel 8½c

SOLDER.

XXX Guaranteed ½ & ½ per lb.	18 c
Commercial ½ & ½ per lb.	17½c
No. 1 Plumbers	15½c

SHEET ZINC.

500 lb. Casks case, per cwt.	$7 15
300 lb. Casks per cwt.	7 15
Sheets per cwt.	7 15

COPPER.

Copper sheet, 100 lbs. over, base 17c

TIN PIGS AND BARS.

Banca, pigs, per lb	29 c
Straights, pigs, per lb	29 c
Straights in bars, per lb	33 c

LEAD.

American Pig	4.37½@4.40
Bar	4.37½@4.40
National (White) brands (in less than 100 lb lots), per lb	8½c

Sheet.

Full coils per 100 lbs,	$9 00
Cut coils per 100 lbs.	9 50

HARDWARE.

ADZES.

Carpenters'.	
Plumbs	40%
Coopers'.	
Barton's	20%
White's	15%
Railroad	
Plumbs	40%
Ship.	
Plumbs	40%
White's	12½%

AMMUNITION.

Caps, Percussion—per 1,000.

F. L. Waterproof, 1-10s	40c
G D	35c
Musket	60c

Shells; Loaded—

Loaded with Black Powder	40%
Loaded with Smokeless Powder, medium grade	40 & 5%
Loaded with Smokeless Powder, high grade	40 & 10 & 10%
Union Metallic Cartridge Co.:	
New Club, Black Powders	46%
Nitro Club, Smokeless Powders	40 & 5%
Arrow, Smokeless Powders	40 & 10 & 10%
Winchester:	
Smokeless Repeater Grade	40 & 5%
Smokeless Leader Grade	40&10&10%
Black Powder	40%

Gun Wads—per 1,000.

Winchester Gun Wads	15%

Powder.	Each.
DuPont's Sporting, kegs	$ 50
" " ½ kegs	2 50
" " ¼ kegs	1 40
Dupont's Sm'k'less. 50-lb. drum	22 45
" " 25-lb. kegs	11 30
" " 12½-lb. kegs.	5 80
" " 6¼-lb. kegs.	2 97
" 1-lb. cans	15

Shot.

Drop shot, sizes smaller than B, 25-lb. bags, per bag	1 95
Drop shot, B and larger sizes, 25-lb. bags, per bag	2 20
Buck Shot, 25-lb. bags, per bag	2 20
Chilled Shot, 25-lb. bags, "	2 20

ANCHORS

Expansion Screw Anchors 10%

ANVILS

Trenton, 70 to 80 lbs	9½c per lb
Trenton, 81 to 150 lbs	9½c per lb

ASBESTOS.

Board and Paper 33⅓%

AUGURS.

Boring Machine	70%
Irwin's	40&10%
Carpenter's Nut	70%
Hollow.	
Bonney's—list $30.00	75&5%
Stearns, No. 3	36 00
Post Hole.	
Digwell, 8-inch per doz.	12 50
Iwan's Post Hole and Well	40%
Vaughan's, 4 to 9-in., per doz.	6 25
Rafting.	
Snell's	50&5%
Ship.	
Ford's, with or wi'out screw	40-12½%
Snell's " " "	40-5%

AWLS.

Brad.	
No. 3 Handled per doz.	$0 40
No. 1050 Handled "	80
Shouldered, assorted, 1 to 4, per gro.	$1 20
Patent asst'd, 1 to 4 "	85
Harness.	
Common "	95
Patent "	90
Peg.	
Shouldered "	1 20
Patent "	60
Scratch.	
No 1 handled "	4 80
No. 15, socket handled per doz.	1 25
No. 7 Stanley	1 80
Sewing.	
Common per gro.	90
Patent "	90

AXES.

Boy's Handled.	
Lippincott, 3 lb. per doz.	$6 00
Falls City "	6 00
Broad.	
Plumbs, West, Pat	33⅓%
" Can. Pat	40%
" Firemen's (handled) per doz	$1. 75
Plumbs, Miners' (handled) "	6 75
Single Bitted (handled)	
Gladiator . 3 to 4 lbs , per doz	$11 00
Flint Edge " " "	9 25
Standard " " "	9 25
Elec Chopper, Forest Clipper	10 50
Perfect Premier " "	10 00
Crown " "	7 00
Single Bitted (without handles)	
Gladiator 3 to 4 lbs. per doz.	$8 50
Flint Edge. " "	7 00
Standard " "	7 00
Electric Chopper " "	8 25
Perfect " "	7 75
Crown " "	6 25
Double Bitted (without handles).	
Gladiator 3 to 4 lbs. per doz.	11 50
Flint Edge. " "	9 75
Perfect " "	11 00

The above prices on axes of 3 to 4 lbs. are the base prices.

4½ to 4½ lbs advance 25c
4 to 5 lbs. advance 50c.
4½ to 5½ lbs. advance 75c.

BAGS, PAPER NAIL.

Pounds	10	16	20	25
Per 1,000	$2.50	3.75	4.50	5.00

BALANCES, SPRING.

Frary's	40%
Pelouze	20%

BARS, CROW.

Pinch or Wedge Point per cwt. $3 75

BASKETS.

Clothes.			
Small Willow per doz.	$7 00		
Medium " "	8 75		
Large " "	10 50		
Galvanized Iron.	½ bu.	1 bu.	1½ bu.
Per doz	$4 75	6 50	8 00

BEATERS.

Carpet.	per doz
No. 10 Coppered Spring Wire.	$0 90
No. 12 Spring Wire	1 10
No. 10 Preston	1 10

Egg.	Per doz.
No. 50 Imp. Dover	$0 75
No. 102 " " tinned	85
No. 150 " " hotel	1 40
No. 10 Heavy hotel tinned	2 10
No. 13 " " "	3 30
No. 15 " " "	3 60
No. 18 " " "	4 50

BELLOWS.

Blacksmiths'	65%
Hand.	
8-inch per doz.	$8 50
10-inch "	10 50
Moulders'.	
12-inch "	12 50

BELLS.

Call.	
3-inch Nickeled Rotary Bell, Bronzed base per doz.	$5 00
Cow.	
High Grade	60%
Kentucky	65&10%

Door.	Per doz.
New Departure Automatic	$6 00
Rotary.	
3 -in. Old Copper Bell	4 00
3 -in. Old Copper Bell, fancy	6 00
3 -in. Nickeled Steel Bell	4 50
3½-in. Nickeled Steel Bell	5 00

Hand.	
Hand Bells, polished	60&5%
White Metal	40%
Nickel Plated	30%
Swiss	40&33⅓%
Silver Chime	33⅓%
Miscellaneous.	
Church and School, steel alloy	50%

Parm. lbs	40	50	75	100
Each	$1.25	1.60	2.35	2.85

BEVELS, TEE

Stanley's, rosewood handle, new list	25%
Stanley's iron handle	25%

BINDING, OILCLOTH.

Zinc	80%
Brass	70&10%
Brass plated	75&5%

BITS.

Auger.	
Extra Double Spur	70&10%
Ford's Car and Machine	40&10%
Triumph	50&5%
Ford's Ship	40&10%
Irwin	50%
Russell Jenning's	25&10%
Clark's Expansive	60%
Steer's " Small list, $22.00	25%
" " Large " $26.00	25%
Irwin Car	45%
Ford's Ship Auger pattern Car	40&10%
Center	40&10%
Countersink.	
No. 18 Wheeler's per doz.	$1 25
No. 20 " —.. "	1 75
American Snail head "	75
" Rose " "	90
" Flat "	75
Mayhew's Flat "	1 25
" Snail "	1 25
Dowell	
New Jennings	40&10%
Gimlet.	
Standard Double Cut	60%
German Pattern per doz.	$0 60
German "	65
Gouge "	80
Spoon "	80
Countersink "	1 00
Reamer.	
Jenning's Square "	2 50
Standard Square "	75
German Octagon "	75
Screw Driver.	
No. 7 Common "	50
No. 1 Triumph "	1 25

BLACKING, STOVE. (See Polish).

BLADES, SAW.

Butchers'.
Standard, ¾ & 1¼-in. 40%
Clock Spring 40%
Star 15%
Coil ..... each, $1 50

Hack.
Disston's ..... 25&5%
Flexible ..... 33⅓&5%
Star ..... 20&5%

Wood.
Jackson's ..... per doz. $2 25
Disston's—No. 6, 10, 26 & 045 .. 4 25
Triumph 3 50
Forest Clipper 3 00

BLOCKS.

Snatch.
Wooden ..... 60&10%
Steel 50%

Tackle.
Iron Strapped 70%
Com. Steel 60%

BOARDS. (New List)

Slate ..... 50&10%

Wash.
Globe, single ..... per doz. $2 50
Globe, double ..... " 3 25
Peace Maker ..... " 3 00
Crystal Glass ..... " 4 00
Brass King ..... " 4 00
Nickel Plate ..... " 4 15

BOBS, PLUMB.

Carpenters'.
No. 2, iron ..... per doz. $0 65
No. 00, " ..... " 1 20
No. 0, " ..... " 1 30
No. 3, lead ..... " 2 00
No. 4, " ..... " 3 40
No. 113, brass plated .. " 1 10
No. N30, nickel plat'd. " 1 20
No. N31, " " " 1 80

BOLTS.

Carriage, Machine, etc.
Carriage, ⅜x6 and sizes smaller and shorter ..... 70&10%
Carriage, sizes larger and longer than ⅜x6 ..... 60&5%
Machine, ⅜x4 add sizes smaller and shorter ..... 70&10%
Machine, sizes larger and longer than ⅜x4 ..... 60&5%
Elevator ..... 50-10&5%
Plow ..... 60&10%
Stove ..... 60&10%
Tire 75%
Wagon Box Strap 70%

Mortis, Door.
Gem, iron 60%
Gem, bronze plated 20%

Barrel.
Cast 60%
Wrought .....
Wrought, bronzed 50%

Flush.
Wrought ..... 50&10%

Spring.
Wrought .....
Wrought, heavy .....

Square.
Cast ..... 50&10%
Wrought .....

BORERS.

Angular.
Miller's Falls ..... per doz. $13 00

Bung. Doz.
Enterprise Mfg. Co's No 1 ... $14 00
" " " No 2 ... 18 50

BOXES

Mail, No. 1 2 10
Per doz $3.50 5.00 17.50

Miter.
New Langdon ..... 15&5%
Stanley's 30%
Seavey's ..... each, $1 50

BRACES.

Barber's ..... 50&10&10@50&10&15%
Fray's Genuine Spofford's 60%
" Nos. 66 to 146 ..... 30%
" No. 0108 ..... $3 50
" No. 66 ..... 2 75
" No. 010 ..... 2 85

BRACKETS.

Hay-Rack.
Wenzelmann's No. 1, per doz. $0 00
" No. 2, " 9 00

Shelf.
Cast Iron, bronzed ..... 50-10&5%
Clover Wrought Steel ..... 70&10%
Clover Folding 70%

BROILERS.

Wire 70%
No. Cwron, Self-basting, 50doz .. $3 50

BUCKETS.

Pump, Rubber.
Wychoff ..... per gro. $4 75
Cooper ..... " 4 75
Champion ..... " 7 50
Victor ..... " 9 25
Star ..... " 5 00
IXL ..... " 6 75

Well.
Galv'd Qts 10 12 14
Per doz $2.90 $3.25 $3.40
Wooden, top ear, plain, per doz. 4 00
" " swivel, " 5 10

BUCKS, SAW.

Folding ..... per doz. $2 10

BURRS, RIVETING.

Copper Burrs only 30%
Tinners' Iron Burrs only ..... 65&5%

BUTTS.

Cast Iron ..... 70&5%
Wrought Brass (New List) 40%
Wrought Steel, Bright.
Wrought Steel, Japanned.
Nos. 721 and - ..... 70&10%

CALIPERS.

Double ..... 65&5%
Inside and Outside ..... 65&5%
Wing 70%

CALKS.

Lagger's Boot.
(Luffkin R. Co.'s), per M $3 75

Toe.
Shoenberger ..... per lb 5 c
Bessemer ..... " 4½c
American ..... " 7 c
Swedes ..... " 8½c

CANS.

Cheese Factory.
Ontario Pattern.
Gallons 20 30 40
Each $4.25 $5.00 $6.25

Milk.
Holstein.
Nos 300 301 302
Gals 5 8 10
Per doz $26.00 $27.00 $29.00

Chicago Pattern.
Nos 105 108 110
Per doz $19.00 $21.50 $23.00

Iowa Pattern.
Nos 408 410
Per doz $23.50 $24.50

New Elgin Pattern.
Nos 705 708 710
Per doz $25.00 $27.00 $28.00

Burn Pattern
Nos 700 701
Gals 8 10
Price $2.40 $2.60

CAN OPENERS.

See Openers.

CAPS, GUN.

See Ammunition.

CARPET STRETCHERS.

See Stretchers.

CARRIERS.

Hay.
Diamond, Regular ..... each, $3 00
Diamond, Sling ..... " 6 50
Myers' Imperial ..... " 3 50
Myers' Clover Leaf ..... " 4 00

CARTRIDGES.

See Ammunition.

CASTERS.

Standard—Ball Bearing ..... 50&10%
Bed ..... 60&5%
Common Plate.
Brass Wheel ..... 60&10%
Iron and porcelain wheels, new list ..... 60&5%
Philadelphia Plate, new list 70%
Martin's 60%
Payson's ..... 75&10%

CATCHERS, GRASS.

Carroll's, No. C ..... per doz. $4 25
Wildermuth's.
Nos 1 2 3
Per doz $5.00 $5.75 $6.25
Nos 4 5 6
Per doz $6.75 $8.50 $10.00

CHAIN AND CHAINS.

Breast Chains.
Doubleslack ..... doz. pairs, $5 75
With Covert Snaps 3 00
With Slide 3 25
Without Slide 2 50

Bright Ox Chains.
½-in. $7.35; ⅝-in. $5.45 per 100 lbs.

Cable Coil Chain.
Inch ..... 5/16 ⅜ 7/16 ½
Per 100 lbs. $10.50 $6.00 $7.00 $8.20
Inch ..... 9/16 ⅝ ¾ ⅞
Per 100 lbs. $6.00 $5.90 $5.75 $5.65
Inch ..... ⅞ 1 1¼
Per 100 lbs $5.55 $5.55 $5.65

Cable Log Chain.
Advance 25c per 100 lb. on Cable Coil.

Cow Tie Chains.
American, 2 toggle ..... 50&5%
" toggle and snap ... 50&5%
" open and closed ring ..... 50&5%

Halter Chains.
American, new list 33⅓%
German 60%
Niagara, new list 40%
Brown's, " 40%

Picture Chains.
Light Brass, 3 ft ..... per doz. $0 65
Heavy Brass, 3 ft .... " 1 00

Pump Chain
Galvanized, per 100 lbs $5 50

Safety Chain.
Brass 60%

Special Steel Loading Chain.
Inch ..... ½ 9/16 5/8
Per 100 lbs $10.00 $13.50 $12.50

Stretcher Chains.
9/16-in. $8.50; ⅝-in. $7.75 per 100 lbs.

Tie-Out Chains.
Brown's ..... 70&5%

Trace Chains.
Western Standard.
6½— 6-2 ..... per pair 30c
6½— 8-2 ..... " 34c
6½— 8-3 ..... " 32c
6½—10-2 ..... " 38c
7 — 8-2 ..... " 35c
7 —10-2 ..... " 42c
7 —10-1 ..... " 48c
7 —10-0 ..... " 60c
Add 2c per pair for Hooks.
Add 2c " for Twist Link.

Wagon Stay Chains.
Inch ..... ½ 9/16 ⅝
Per 100 lbs $6.50 $6.00 $5.50

CHALK, CARPENTERS'.

Blue ..... per gro. 75c
Red ..... " 65c
White ..... " 55c
Common White School Crayon ..... " 8c

CHARCOAL.

In bags ..... per bag 90c

CHECKS, DOOR.

Blount 33⅓%
Sargent's 33⅓%

CHIMNEY TOPS.

Swan's Volcano 50%

CHISELS.

Box.
Inches 10 12 14
Round per doz $2.40 $2.25 $2.75
Flat " 2.85 3.00 4.20

Cold.
Good quality, ⅝ in. and larger ..... per lb. 12c
Smaller size per doz .....

Socket, Framing and Firmer.
Clover ..... 75&10%

Tanged, Firmer.
With handles ..... 30&5%

Choppers, See *Cutters, Meat.*

CHUCKS, DRILL.

Goodell's, for Goodell's Screw Drivers ..... per doz. $6 25
Yankee, for Yankee Screw Drivers 5 00

CHURNS.

Anti-Bent Wood.
Gal 5 7 10
Each $3.90 $4.60 $4.85
Belle, Barrel ..... 65&7½%
Common Dash, Gal. 4 5 6
Per doz $7.75 $8.50 $10.50
Union, Gal 5 7 10
Each $3.65 $3.90 $4.75

CLAMPS.

Adjustable.
Martin's 30%

Carpenters'.
Steel Bar 25%

Hose.
Sherman's, brass, ¾-in., per doz .. 42c
Double brass, ¾-in., " 90c

Saw Filers.
Disston's list, $30.00 ..... 30%
Stearns', No. 0, $2.50; No. 1, $11.50; No. 2, $5.00 doz.
Wentworth's, No. 1, $6.00; No. 3 $7.50.

CLAWS, TACK.

Cast, wood hdle ..... per doz. 45@60c
Forged steel, wood hdle " 80@90
Solid steel ..... " 1 00
Giant ..... " 50

CLEANERS.

Drain.
Iwan's Adjustable 55%
Iwan's Stationary ..... 40&5%

Pot.
Wire ..... per doz. $0 55

Side-Walk.
Steel ..... per doz. $3 25
XLCR ..... 65&5%

CLEAVERS

Family.
Griffin, Inch 6 7 8
Per doz $5.50 $5.75 $6.25
Royal ..... per doz. 2 25

Butchers.
Plumbs 25%

CLEVISES

Malleable ..... 5½c lb.

CLIPPERS.

Bolt ..... $1.00@4.75

CLIPS.

Axle ..... 65&5%

Damper.
Standard ..... per doz. 65c
Troy ..... " 38c

Hame ..... " 17

CLOTH

Emery.
Star 50%
B. & A. 50%

Hardware Wire—full rolls (100 ft.)
2 to 3 incl., Galv.—in full roll ... 2 75
4 and 5 ..... " .. 3 00
6 ..... " .. 3 25
7 and 8 ..... " .. 3 75

Screen Wire.
12 mesh, painted, per 100 sq. ft .. 1 25

COCKS AND FAUCETS.

Compression Plain Bibbs ... 60, 10&5%
Lever Bibb Cocks ..... 60, 10&5%
Compression Hose Bibbs .. 50—10&5%
Telegraph Faucets (new list) .. 50—5%
Backing Cocks (new list) ... 60, 10&5%
Compression Lock C'ks (new list) . 70%
Andrew's Brass Faucets 70%
Angle Plug Faucets, per doz ... $0 85
Milk Can Faucets, per doz .. $2.60-4.20
Petroleum Faucets ..... 75&5%

COLLARS, STOVE PIPE.

Inches 5 6 7
Plain Tin .. per gro. $1.90 $3.40 $3.50
Japanned Tin " 3.00 3.00 4.25
Lacquered Brass " 3.00 5.50 4.25

COMBS, CURRY.

Doz ... 600 11 15 20 88 108
Per doz .. $.37 .60 1.00 .90 1.15 .80
Doz ... 290 320 350 532 620 1400
Per doz .. $1.05 .85 1.35 1.20 .75 1.40

COMPASSES.

Carpenters' ..... 60—10—10%
Pencil—Faber's ..... per doz. $1.00

COPPER—See Metals.

COPPERS.

Soldering.
1 lb ..... per lb 30c
1½ lb ..... 31c 2 lb ... " 29c
3 lb and larger ..... " 28c

CORD.

Picture
White Wire (new list) ..... 65&10%

Wash.
Monarch Braided Flax ... per lb
Silver Lake, white, 7-32 in. "
Silver Lake, white, 8-32 in. "
Keystone ..... 8-32 in. " 20c

CORKSCREWS.

Humason & Beckley 33⅓%
Walker's 33⅓%
Williamson's Regular ..... 40&10%
Williamson's Forged Worm 50%

COTTERS, SPRING.

All sizes—new list ..... 90&30%

COUPLINGS, HOSE.

Brass ..... per doz. $
Brass Plated ..... " 65

COVERS, WAGON—See Tents.

CRADLES, GRAIN.

Morgan's Grapevine ... per doz. $22 75

CRAYONS—See Chalk.

CROW BARS.

Inch or Wedge Point.....per lb 3½c

CUTTERS.

Glass.
Red Devil.....45%
Smith & Hemenway Co.....50%
Woodward.....40%
Meat.
Enterprise, Nos. 5, 10, 12, 22, 32 and 42.....25%
No. 202, list, $1.50 ea.....40&7½%
Pipe.
Stanwoods. No.... 1 3 3
Each.....$0.85 $1.50 $4.00
Slaw and Crout.
3-knife Crout.....per doz. $9 75
1-knife Slaw..... " 1 65
2-knife Slaw..... " 2 25
Washer..... " 7 75

DAMPERS, STOVE PIPE.

Jewel.....50&10%
American.....50%

DIES AND STOCKS.

Discount.....40%
King's, Little Giant.....33⅓%

DIGGERS.

Post Hole.
Acme.....per doz. $9 25
Atlas..... " 9 00
Eureka..... " 7 50
Hercules..... " 10 25
Iwan's Split Handle.. " 7 50
Iwan's Perfection.... " 9 00
Iwan's Hercules pattern " 10 00
Ryan's..... " 17 00
See also Augers—Post Hole.
Dividers, Wing.....65&10%

DOOR CHECKS—See Door.

DOORS, SCREEN.

1¼ in. 4-panel, painted...per doz. $7 93
1½ in. 4-panel, painted... " 9 50
1½ in. 3-panel, natural pine, fancy..... " 12 40

DOOR HANGERS—See Hangers.

DRILLS.

Bit Stock.....60&10%
Blacksmith's Twist.....60%
Breast.
Fray's No. 9.....each, $1 75
Millers Falls' No. 12..... " 2 10
Hand.
Goodell's Automatic.
Nos.... 01 03 3 20
Per doz.. $7.75 $12 50 $12.50 $11.00
Goodell's Single Gear. per doz. 15 75
Millers' Falls " " " 12 75
" " Double " " 15 25
Reciprocating.
Goodell's.....per doz. 16 50
Bit Stock.
Standard List.. 60&5%@60%@10

DRIVERS, SCREW.

Standard.....65&10%
Lock Ferrule.....60%
Champion.....40&10%
Champion Pattern.....70%
Clark's Interchangeable.....30%
Edison.....60%
Reed's Lightning.....45&5%
Goodell's Spiral.....50, 10, 5&2½%
Yankee Ratchet.....50%
" " Spiral.....50&10%
Smith & Hemenway Co.....40&5%

EAVES TROUGH, GALVANIZED

Terms, 2% for cash. Factory shipments generally delivered.

See also conductor pipe and elbows.

EGG BEATERS—See Beaters.

ELBOWS.

Adjustable Stove.
Inches..... 5 6 7
Smooth, per doz...$0.75 $0.85 $1.20
Plan'd, " 1.80 2.00 2.60
Corrugated Conductor.
Discount.....75&10%
Corrugated Stove.
Inches..... 5 6 7
Smooth, per doz..$0.85 $1.00 $1.50
Pol'd, " .. 1.40 1.65 2.25
Plan'd, " .. 2.15 2.65 3.40
Four-Piece Stove.
Inches..... 5 6 7
Smooth, per doz..$0.60 $0.65 $0.90
Planished, " .. 1.40 1.70 2.30

EMERY CLOTH—See Cloth.

EMERY TURKISH.

Size	5-lb. pkgs.	½ kegs.	kegs.
No 60 to 150, per lb..	6c	4c	4c
Flour..... " ...	5c	3c	3c

ENAMEL, IRON.

A-B Iron Enamel, 3 doz. case, ...per gro., 15 00
Peerless..... 1 20

EXTRACTORS, PIG.

See Forceps, Pig

EYES.

Bright Wire Screw—See Goods, B. W
Drifting Pick.....60, 10&5%
Hooks and—
Brass.....50&10%
Iron.....70%

FASTENERS, STORM SASH.

Schroeder's.....per doz. $0.85
Sensible..... " 1 15

FAUCETS—See Cocks.

FILES AND RASPS.

Delta.....70&10%

FLUE STOPPERS—See Stoppers.

FORCEPS, PIG.

Superior.....per doz. $4 75
Whisson's Imp..... " 5 25

FORKS.

Barley.
Steel New List.....65&10%
Wood, 4-tines, per doz.....$5 00
Coal, Coke, Cottonseed.....30%
Hay.
2-tine.....60%
3 " .....60&5%
4 " .....60&10%
Digging.....65&5%
Scoop.....30%
Leader.
3-tine.....60&5%
4 " .....60&5%
Manure.
4-tine.....60%
Ore.....40%
Spading.

FRAMES.

Hack Saw.
Union.....per doz. $5 75
Jenning's adj..... " 7 50
Cast..... " 3 50

FREEZERS, ICE CREAM.

Arctic.
Qts..... 1 2 3 4 6
Each...$1.10 1.30 1.50 1.80 2.20
Qts..... 8 10 12 15
Each.....$2.95 3.80 4.50 5.20

GAUGES

Butt and Rabbet.
Cream Pail.
Fairmont.....per doz. $3 75
Marking, Mortise, etc.....
.....50&10%
Saw.
Wire.
Disston's.....25%

GIMLETS.

Discount.....35@40%

GLASS, WINDOW.

Single.....90&20%
Double.....90&25%

GLASSES, LEVEL.

GLUE.

Bulk.
B Amber.....per lb. 12 c
A White..... " 15 c
H. S. Amber..... " 16½c
Liquid.
Army & Navy.....40%
Le Page's—
List "A".....27½%
List "B".....33⅓%
List "C".....25%

GOODS.

Bright Wire.....20%

GREASE, AXLE.

Wood Boxes.
Diamond.....per gro. $5 00
Fraser's..... 9 00
Hub Lightning..... 5 25
Paragon..... 6 75
Wood Pails.
Fraser's, 15 lb. 80c; 25 lb. $1.30 each.
Hub Lightning, 15 lb. 55c; 25 lb. 70c each.
Tin Cans.
Chamellene Graphite.
1 lb. per gross.....$9 50
3 lb. per gross.....25 00
5 lb. per gross.....37 00

GRIDDLES.

Soapstone.....33⅓%

GRINDSTONES.

Family.
Inches..... 7 8 9
Per doz.....$8.25 9.00 10.50
Loose.
Per ton.....$20 00@$21 00
Mounted.
Ball Bearing..... 1 2 3
Each.....$3.15 3.00 2.85
Common Bearing..... 1 2 3
Each.....$3.00 2.80 2.65

GUN WADS
(See Ammunition.)

HAFTS, AWL.

Brad.
Common.....per doz. $0 10
Peg.
Common..... " 22
Patent, plain top..... " 47
Patent, leather top... " 53
Sewing.
Common..... " 23
Patent..... " 53

HALTERS.

Jute Rope.....per doz. $1 10
Sisal Rope..... " 1 85
Web..... " 2 00
Leather, rope tie..... " 8 50
Leather, leather tie..... " 11 50

HAMMERS, HANDLED.

Blacksmiths' Hand.
Plumbs.....60&5%
Engineers'.
Plumbs.....60&5%
Farriers'.
Plumbs.....40&10%
Machinists'.
Plumbs.....60&5%
Nail.
Plumbs.....40&7½%
Quaker City.....per doz. $3 50
Cast..... " 1 15
Maydole's.....30&5%
Riveting.
Plumbs.....40&12½%
Shoe.
Cast.....per doz. $0 75
Tack.
All Iron.....per doz. $0 35
Pol'd Iron, Hickory hdl. " 50
Mall. Iron, Inlaid..... " 1 55
Magnetic..... 1 2 3
Per doz.....$0.70 .80 1.00
Magazine.. .....per doz. 4 75

HAMMERS, HEAVY.

Heavy Hammers and Sledges.
Under 5 lbs.....30&5%
5 lbs. and over.....30&10%
Masons'.
Single and Double Face.....30&5%

HANDLES.

Auger.
Common Assorted....per doz. $0 32
Peck's Adjustable..... " 2 10
Ives' Adjustable.....per set, 1 35
Axe.....60%
Chisel.
Hickory, Tanged Firmer, Assorted, 23c; Large, 35c per doz.
Hickory, Socket Firmer, Assorted, 27c; Large, 30c per doz.
Applewood, Tanged, Firmer, Assorted, 20c; Large, 35c per doz.
Applewood, Socket, Firmer, Assorted .....per doz $0 24
Coal Pick.....50&10%
Drifting Pick.....50&10%
File, assorted, 13c; Large, 16c per doz.
Hammer.
Adze Eye.....per doz. $0 40
Blacksmiths'..... " 40c@70c
Machinists'..... " 45c@70c
Hatchet..... " 40
Hay and Manure Fork.....30%
Hoe and Rake.....30%
Plain.....per doz. $0 75
Varnished..... " 80
Screw Driver.
Assorted..... " 37
Large..... " 42
Shovel and Spade.....30%

HANGERS.

Barn Door.
Nansen.....60&10%
Matchless.....70&10%
Storm King.....60%
World's Best.....30%
Wagner's Adjustable.....70&10%
Warehouse.....60%
Conductor P.
Griffin.....70&10%
Iwan's Perfection.....50%
Eave Trough.
Baker's.....per gro. $2 25
Imperial.....20%
Wire.....33⅓%
Parlor Door.
Acme.....per set, $3 75
Ives' Improved..... " 2 50
Lane's Standard..... " 3 50
Lane's New Model.... " 3 10
Le Roy Noiseless..... " 4 00
Richards'.....40-10&5%

HASPS.

Hinge, Wrought.....40%
With Staples—See Staples.

HATCHETS.

Crown.....60-10&5%
Cast Claw.....per doz. $1 10@1 35
Cast Shingling.... " $0 85@1 10
Germantown.....30%

HAY KNIVES.

See Knives.

HAY RACK BRACKETS.

Wensleman's No. 1.....per doz. $9 00
Wensleman's No. 2..... " 9 00

HINGES.

Blind.
Clark's Gravity...per doz. sets, 95c
Parker's.....65%
Shepherd's Noiseless, for Wood Casing.....per doz $1 05
Gate.
Clark's..... 1 2 3
Hgs & Latch.. doz. $2.50 2.90 4.00
Hinges only... " 1.50 2.50
Latches only . " .70 .75
Kanakie.....per doz. prs. $8 00
Lead's..... " sets, 6 75
Superior..... " prs. 9 00
Spring.
American.....30%
Chicago.....35&5%
Columbia Dbl. Acting....40&10&5%
Gem.....25%
Ideal Detachable.....per gro. $11
Matchless.....30%
New Idea.....per gro. $8 00
Oxford.....50%
Wrought Iron
New Lists .....
McKinney
Light Strap Hinges.....60%
Heavy Strap Hinges.....65%
Light T Hinges.....55%
Heavy T Hinges.....45%
Extra Heavy T Hinges.....60%
Screw Hook and Strap.
6 to 12 in.....per 100 lbs. $3 75
14 to 20 in..... " " 3 65
22 to 36 in..... " " 3 40
Screw Hook and Eye.
½ in.....per 100 lbs. $6 75
⅝ in..... " " 7 75
¾ in..... " " 9 75

HOES

Garden .....70&10%
Grub.
Extra.....70%
Hazel.....per doz. $5 00
Ladies' and Boys'.....75%
Mortar.....75&10%
Planter's Eye.....62½%
Wood.....75&15%

HOLLOW WARE—See Ware.

HOOKS.

And Eyes.
Brass.....50&10%
Iron.....65&10%
Awning.....per gro. $1 00
Bolt.
Brown's.....70&5%
Jaber.....65&5%
Bench.
See Stops, Bench.

Box.
Inch.......... 6 8 10 12
Per doz.......$1.25 1.65 1.75 2.30
Humason & Beckley's..per doz. $2 50
(See Goods, Bright Wire.)
Bush.
Common Axe Handle.per doz. $7 00
Chain.
Inch...... 5-16 3/8 7-16 1/2
Per 100...$7.00-8.10 9.75 11.50 12.00
Clothes Lines.
Japanned ....per doz 22c@24c
Galvanized........ " 40c
Coat and Hat
Cast Iron .... per gro. 72c@$1 50
Gem Wire..................70%
Conductor.
Malleable....................25%
Wrought....................20%
Corn.
Common, unpolished, per doz. $1.50
Little Giant......... " 3 25
Gate.
See Goods, Bright Wire.
Grass.
Common. Nos..... 2 3 1
Per doz...........$1.50 1.00 1.70
German...............per doz. 1 75
Little Giant......... " 3 75
Hammock.
With plate..........per doz. 50
With screw.......... " 45
Lambrequin, or Drapery, per gro. .21c
Picture...............50%@50&10%
Potato and Manure..........70&12½%
Screw.
Brass.....................80&5%
(See Goods, Bright Wire.)
Seat Spring..............per lb. 5½c

HOOPS, TUB.

Elastic ... per case of 2 doz.... $1 50

HOSE, GARDEN.

		Coupled, per ft.
Heron, 3 ply-¾" guar. press	55 lbs.	7½c
Crane " " "	75 "	8½c
Falcon " " "	95 "	9½c
Eagle " " "	120 "	10½c
Condor " " "	150 "	11½c
High Test " " "	200 "	12½c

COTTON COV. RUBBER HOSE.

High Grade-¾"-guar. press.	400 lbs.	11½
Special " " "	300 "	9½c
Leader " " "	100 "	7½c

HUSKERS.

Boss.
Nos.......... B BB E 200
Per doz.......$2.00 2.00 1.75 .90
Nos.......... L PP P K
Per gro......$5.40 6.00 6.00 10.50
Nos............... 2000 3000 O
Per gro..............$8.50 9.00 24.50
Nos.......... 60 50 64 68
Per doz.......$2.15 2.15 .85 1.45
Brinkerhoff's.
Per gro......................$14 40

IRON.

See Metals.—First column.

IRONS.

Curling.
X.................per doz. $0 40
Y................. " 50
Z................. " 56
Jewel................. " 85
Imperial................. " 1 00
Pinking................. " 70
Plane.
Wood Bench..................20&5%
Sad.
Charcoal............per doz.$11 00
Common, polished, per 100 lb. 4 50
Common, nickel plated, 5 25
Chinese Polishing.....per doz. 7 40
Laundry, No. 1......... " 5 75
Laundry, No. 2......... " 6 25
Mrs. Pott's,
No. 50 J, Enterprise, per set .93
No. 55 J, " " 90
No. 50 T, " " 1 00
No. 55 T, " " 96
Tailors' Sad............per lb. 5½
Tailors' Geese............ " 5½
Tuyere.
Single Duck Nest.....per doz $5 25
Double Duck Nest .. " 6 25
Sutton..............each.... 2 60

JACKS.

Locomotive..................70%
Wagon.
Oliver,
Nos................. 0 00
Each...............$0.60 $0.80

Standard.
Nos.................. 1 2
Each..................$0.60 1.00
Wilcox.
Nos.......... 1 2 3
Each..........$0.85 1.20 2.90

KETTLES.

Brass.......................15%
Cauldron....................40&5%
Copper..................per lb., 27c
Maslin......................65%
Sugar.......................50%

KNIVES.

Beet Topping.
Clyde, 9-in. Scimiter Blade, doz.$3 85
California.................. 3 40
Cooper's Hoop...............15%
Corn.
Clipper...............per doz. $1 75
Disston's............ " 2 75
Earle's............ " 3 00
Woodford............ " 2 25
Drawing.
Standard....................70%
Adjustable..................15%
Barton's Carpenters'.........10%
Folding Handle..............25&5%
Hay.
American, Sickle Edge...doz. $10 50
Canton, Sickle Edge.... " 8 25
Heath's................ " 8 00
Iwan's, Sickle Edge..... " 9 50
Iwan's, Impv'd Serrated . " 10 00
Lightn'g, Holt's Genuine. " 6 50
Lightning Pattern....... " 6.00
Wadsworth's Sp'r Point.. " 8 50
Hedge.
Challenge............per doz. $6 00
Disston's............ " 3 75
Mincing.
Common, Single...... " 40
Common, Double...... " 50
Streeter, 4-Blade..... " 1 30
Streeter, 6-Blade..... " 2 00
Putty.
Common.......per doz. $0 60@1 00
Lander's....... " 1 40@1 75
Scraping.
Beech Handle.......... 75@1 00
Lander's.............. 5 25@6 00

KNOBS.

Door.
Mineral.............per doz. $0 80
Porcelain........... " 90
Jet................. " 90

LADDERS.

Common Long.
Per ft.....................9c@14c
Extension.
Per ft.........................14c
Step.
Common, per ft................7½c
Common, with Shelf, add 10c.
Keystone......................15c
Triumph, per ft...............20c

LANTERNS.

Bull's Eye Police.
3-in. Flash Light.....per doz. $6 00
2½-in. Regular....... " 4 90
3-in. Regular....... " 5 50
Tubular.
Dietz & Hanes'..........net prices.

LEADERS, CATTLE.

Nos.............. 1 2 3
Per doz.......... $0 55 .70 2.75

LEATHER, LACE.

Cut........................33⅓%
Sides.
Ex. Quality ....per sq. ft., 27

LEATHERS, PUMP.

Valve and Plunger..............10%

LIFTERS.

Stove Cover.
Coppered.......per gro. 1 75@3 65
Ideal.......... " 5 50
Alaska, Coppered " 4 00
Alaska, Nickeled. " 5 00
Transom.
Payson's.......................80%

LINES.

Chalk.
Twisted in 20-ft. hanks.
Nos.... 4 6 7 8 9
Gross...$1.50 2 00 2 25 2 50 3 00
Twisted in 50-ft. balls.
Nos.......... 1 2 3 4
Per doz......... 25c 30c 35c 41c
Braided in 20-ft. hanks.
Nos.......... 0 1 2 3
Per doz.......... 22c 25c 31c 35c
Mansons', in 100-ft. hanks...doz. 80c
Clothes.
60-ft. Jute..........per doz. $0 85
72-ft. Jute.......... " 1 15
60-ft. Sisal.......... " 1 40
72-ft. Sisal.......... " 2 15
80-ft. Cotton.......... " 1 15
80-ft. Braided Cotton. " 25

LINING, STOVE.

In Bricks..............per crate. 42c

MACHINES.

Boring.	Without Augers	With Augers
Angular.....per doz.	3 00	4 40
Upright..... "	2 60	4 00

Leather Riveting.
Chicago, Pomeroy....per doz. $9 00
Excelsior.......... " 2 00
Handy.......... " 2 00
Little Giant.......... " 3 00
Pony, Pomeroy.......... " 7 20
Washing.
Winner.............per doz. 54 00
Keystone............. " 54 00
U. S. Steel............. " 60 00
Advance, f.o.b.Chicago " 24 50

MAIL BOXES.

See Boxes.

MALLETS.

Carpenters'.
Fibre Head, Small....per doz. $5 00
" " Medium. " 5 75
" " Large... " 7 00
Round Hickory...... " 2 25
" Lignumvitæ... " 4 00
Square Hickory...... " 2 25
" Lignumvitæ... " 4 50
Tinners'.
Applewood........ " 1 70
Hickory........ " 1.00@1 50
Hickory Sheet Iron... " 1 50

MATS.

Door
National Rigid..........80, 10&5%
Acme Steel Flexible.........33⅓%
Stove.
No. 2...............per gro. $3 25
No. 1............... " 3 50
No. 1 Asbestos Toasters, or wire-covered Stove Mats, with handle........per doz. 1 10
No. 2 Asbestos Toasters, with ring...............per doz. 60

MATTOCKS.

Plumbs....................65&10%
Extra......................60%

MAULS.

Iron, lbs....... 10 13 16 18
Per doz.... $4.00 4.50 5.25 5.00
[illegible], lbs...... 10 12 14
Per doz......... $5.00 5.50 6.00
Wood Choppers'.
Lake Super'r & Oregon Pat. 75&10%

MEASURES.

	½ pk.	1 pk.	bu.
Galvanized, per doz.	$2.25	3.00	3.85
Japanned.. "	1.75	2.45	3.15

MICA.

First Quality...............40&5%
Second Quality..............50&5%

MILLS, COFFEE.

Enterprise.....................25%
Parker...............40-12½&2½%
Arcade...............40-12½&2½%

MITRE BOXES.

See Boxes.

MOPS.

Erie...............per doz. $3 15
Handled Cotton.
Pounds....... ¾ 1 1¼ 2
Per dozen....$2.00 2.35 2.65 3.25

MOWERS, LAWN.

Gladiator—B. B.
Inches.......... 16 18 20
Each........... 6.50 7.25 8.00
King Universal—B. B.
Each........... 5.25 5.75 6.00
Inches.......... 14 16 18
Big Giant........ 3.50 2.00 4.25
Little Giant........ 2.50 2.65 2.75

NAILS.

Cut Steel..............rates, $2 50
Cut Iron..................... 2 00
Wire.
Small Lots.................. $2 25
Carload Lots................ 2 18
Cement Coated............... 2 30
Horse Shoe.
Ausable....................55&5%
Capewell....................15%
Perfect....................55&5%
Putnam....................20&5%
Star....................35&5%
Clover Leaf ....per lb., net, 10½c
Picture.
Brass Heads....................25%
Brads........................85%
Furniture.....................15%

NAIL PULLERS.

See Pullers.

NAIL SETS.

See Sets.

NETTING, POULTRY.

Galvanized beforeweaving .80,10&2½%
Galvanized after weaving......80&7½%
Cut Pieces...................65&5%

NIPPERS.

End Cutting.
Stubb's Pattern. Inches 5½ 6
Per dozen.............. $4.00 4.25
End and Diagonal Cutting.
Swedish Side..................75%
Utica Drop Forge & Tool Co....60%
Hoof.
Heller's....................40&10%
V. & B....................55&5%

NOZZLES.

Hose.
Genuine Gem........per doz. $3 00
Magic.............. " 3 00
Mystic.............. " 3 00

NUTS, HOT PRESSED.

Square Blank.
In ¼ 5-16 ⅜ 7-16 ½ ⅝ ¾
lb 9½c 8c 6½c 5½c 5½c 5c 4½c
Square Tapped.
In. ¼ 5-16 ⅜ 7-16 ½ ⅝ ¾
lb. 12½c 10½c 8c 7½c 6½c 6½c 6c
For 5-lb. boxes add ½c per lb. to above prices.

OILERS.

Chase Pattern.
Brass and Copper..............60%
Zinc..........................60%
Engineers'.
Cannon........................55%
Tin ....per doz. $2 00@$2 25
Machine.
Common..............per doz. $0 50
Copper Plated Steel... " 1 00
Malleable Iron............60, 10&5%
Japanned....................65@75c

OPENERS.

Box.
Inches........... 10 12 14
Flat......per doz. $2.85 3.60 4.15
Round.... " 2.10 2.25 2.75
Can.
Delmonico ....per doz $1 30
Never Slip.......... " 65
Crate.
V. & B.............. " 5 75

OUTFITS, COBBLING.

Combination...........per doz. 11 00
Economy............... " 4 00
Family............... " 9 75

PADLOCKS.

Standard Wrought............75&5%
Champion......................50%
Eureka....................40, 10&5%
Yale........................60&5%

PAILS.

Cream.
14-qt., without gauge, per doz. $2 50
20-qt., " " " 3 00
20-qt., with gauge.... " 3 50
Sap.
10-qt., Galvanized, per 100....$13 00
12-qt., " " 14 50
14-qt., " " 16 25
16-qt., " " 17 75
10-qt., IC Tin.... " 10 25
12-qt., " .... " 11 75
14-qt., " .... " 13 00
10-qt., IX Tin.... " 12 75
12-qt., " .... " 16 00
14-qt., " .... " 17 00
Stock.
Galv'd, qts. 14 16 18 20
Per doz..... $3.75 4.00 4.75 5.25
Water.
Galvanized... qts. 10 12 14
Per doz.......... $1.95 2.20 2.45
Wood.
Cable, 2-Hoop........per doz. $1 70
Cable, 3-Hoop........ " 1 90
Cedar, 3-Hoop........ " 2 25
Standard, 2-Hoop.... " 1 60
Standard, 3-Hoop.... " 1 80

PANS.

Dripping...................60&5%
Fry
Common ....75&10%
Acme 70%
Roasting.
Paxton,
Nos....... 1 2 3 4
Per doz.... $4.75 5.75 6.50 7.50
Neverburn .. 4.00 4.50 5.50 6.00
Savory, No. 200.......per doz. $8.00

PAPER.

Building.
Plain..............per 100 lbs. $1 25
Tarred.............. " 1 35
Tarred Felt.......... " 1 65
No. 20, Red Rosin....per roll. 60
No. 30, Red Rosin.... 55
Sand and Emery.
Star .... low list, 80%
B. & A.......................80%
Wrapping.
Drab Fibre..........per lb. [illegible]
[illegible]................ " [illegible]

PARERS.

Apple.
Bay State.....per doz. $13 00
Turntable..... " 6 00
White Mountain..... " 5 00
Reading..... " 7 00
Potato.
Goodsell's Saratoga, 10½ in., doz. 6 50
Goodsell's Saratoga, 5 in., doz. 5 50

PICKS.

Adze Eye Ore.....70%
Drifting and Poll Picks.....70%
Plumbs, Railroad.....70%
Surface.....70%

PINCERS.

Carpenters', cast steel.

Inches	6	8	10	12
Per doz.	$2.00	2.60	2.95	3.75

Blacksmiths'.....45%
Heller's.....40%

PINS.

Clothes.
Common.....per box of 5 gro $0 52
Hoyt's..... " " 31
U. S..... " " 70
Picket.
Fluted, 15-in.....per doz. $0 70
Fluted, 21-in..... " 1 60
Spiral..... " 1 00

PIPE.

Conductor.

	Gal. Steel	Charcoal
L. C. L. to Dealers:—		
Eastern	70&10%	50&10&2½%
Pittsburgh	75&10&5%	60%
Central	75&10%	60%
Northwestern	75&7½%	60%
Western	70&12½%	50&12½%
Tennessee	70&10%	50&12½%
Southern	70%	50&12½%
Southwestern	70%	50&5%

Terms 60 days; 2% Cash 10 days.
Factory shipments generally delivered.

Lead.
Full coils.....per lb. 7½c
Cut coils..... " 7¾c
Stove

Acme—Inches	5	6	7
Smooth, per jt.	8½c	9½c	10½c
Planished, "	22 c	23 c	43 c
Peerless—Smooth,	7½c	8 c	9½c
Polished	14½c	15½c	18 c
Planished	28 c	31 c	35½c
Made-up—Inches	5	6	7
Smooth	7½c	8 c	9½c

7 to 6 in. Smooth Tapers, pr jt...13c
6 in. Smooth T's..... " 27c
7 to 6 in. Planished Tapers.....45c

Yale Patent Lock Pipe—Stove.

	5"	6"	7"	7" to 6"
	Cents			
Battle Axe Blue	7	7½	9½	10½
Can't Slip "	7½	8½	10	11
Peerless "	7½	8½	10	11
Duplex "	10	11	13	14
Yale, Rus. Fin.	15	16	17	18
Duplex Planished	29	31	37	38
Galvano, Gal.	15	16	17	18

It wanted made up, add per joint or grooved, 1c; riveted, 1½c. Grating made-up pipe extra.

Wrought Iron Gas Pipe.
⅛@¼-in., black.....discount, 60%
⅛@¼-in., black..... " 60,10&5%
⅜-in. to 6-in., black..... " 70%
7-in. to 12-in., black..... " 62½%
⅛@¼-in., galvanized..... " 42%
⅛@¼-in., galvanized..... " 50%
⅜-in. to 6-in., galvan'd " 57½%
7-in. to 12-in., galvan'd " 45%

PLANES.

Sargent Iron Bench.....60%
Stanley Iron Bench.....25&5%

PLATES, TIN.

See Metals in Column 1.

PLIERS.

Giant, Buttons—80% off list.
Cutting
Bernard's.....30%
Lodi.....50%
Upper End and Diagonal Cutting
Swedish Side.....70%
Utica Drop Forge & Tool Co.....60%
Fencing.
Black Bull.....per doz. $8 25
Farmers' Choice.....per doz. $8 00
Russell's..... " 8 25
Flat and Round Nose.
Bernard's.....30%
German.....65%
Lodi.....50%
Paragon.....50%

Gas.—Inches	7	8	10	12
Per doz.	$3.00	3.50	4.50	5.50

Tinners'.
Hollow.....40%
Solid.....each, 5½c

PLUMBS AND LEVELS

Common.....60&10&10%
Cook's.....40%
Davis' Iron.....25%
Davis' Inclinometer.....15%

POINTS

Drive Well Points.....75&5%

POKERS, STOVE.

Wr't Steel, str't or bent, per doz. $0 55
Wr't Steel, wood hand'l " 80
Nickel Plated, coil hand'l " 65

POKES, ANIMAL.

Cracker Jack, wr't steel, per doz. $4 50

POLISH.

Metal.
A-B Oil Metal Polish, 4-oz. bottles, 3 doz. case, per gr. $9 00
1-gal. can..... 90
White Silk, half pints, per doz. $2 00
White Silk, 6-oz. cans, per doz. 1 00
Shoe.
M. C. D.....per doz.....35c@50c
F. C. O..... " 40c
T M..... " .....35c@$1 75
Imperial.....per gro..... 5 00
Stove.
A-B Polishes.
Liquid Stove Polish.
3 doz. in case..... $2 25
6 " " .....gr., 9 00
Fireproof Stove Polish, 3 and 6 doz. in case.....gr., 12 00
Liquid Waterproof Stove Polish, 10-oz. cans, per gro., 12 00
Oil Paste Polish.
6-oz. cans, 3 doz. case..... 2 25
1-lb. " 3 " " 3 75
5-lb. " per can..... 50
Dry Powdered Stove Polish.
5-lb. box..... 75
100-lb. bbls.....per lb. 12
Powder Polish. 3 doz. 6 do. 12 doz.
$2.25 $4.50 $9 00
Water Paste Stove Polish, ½-lb. boxes, 3 doz. case..per gro., 12 00
Black Eagle, 1-lb. cans, pr gr. $15 00
Black Silk—
5-lb. pail..... $0 70
Paste, 5-oz. cans....per doz. 75
Paste, ½-lb. cans.... " 1 05
Liquid, ½-pt. cans... " 1 05
Liquid, 5-oz. cans... " 75
Black Jack, ½-lb. cans. " 9 25
Dixon's Carb. of Iron. " 5 75
Nickel Plate..... " 4 50

POPPERS, CORN.

Round or Square, 1-qt. per doz. $1 05
Square, 1½-qt..... " 1 15
Square, 2-qt..... " 1 35
1-qt..... " 3 75

POTS, FIRE.

Clayton & Lambert's, each, $4 75@6 25
Gate City.....each, 6 25
Gem.....each, $6 75@8 50

POWDER.

See Ammunition.

PRESSES, FRUIT AND JELLY.

Enterprise Manufacturing Co.....35%

PRIMERS

See Ammunition.

PRUNERS.

Disston's Pole.....per doz. $6 50
Henry's Improved..... " 75&10%
Water's Improved..... " 80%

PULLERS.

Cork.
Daisy.....each, $3 10
Phœnix..... " 1 40
Quick and Easy..... " 2 70
Nail.
Giant.....per doz. 10 50
Giant Pattern..... " 6 00
Jumbo..... " 9 00
Tack—Giant..... " 40

PULLEYS.

Awning—Jap'd.....60%
Clothes Line.....50&10%
Hay Fork.
Iron Wheel, 5-in.....per doz. $1 75
Wood Wheel, 6-in..... " 1 75
Wood Wheel, 6-in. pass knot, ...per doz. 2 15
Hot House—Jap'd.....50&10%
Screw—Jap'd.....60%
Side—Jap'd.....50&10%
Sash.
Common.....per doz. $0 16
Common-Sense, 2-in.. " 20
Empire Pattern, 2-in.. " 20
Ideal..... " 20
Steel..... " 25

PUMPS.

Pitcher Spout.

Nos.	1	2	3	4
Each	$1.00	1.15	1.30	1.70

Spray.
Blizzard.....per doz. $14 50
Cyclone, tin..... " 2 40
Cyclone, copper..... " 6 75
Daisy..... " 9 00
Little Giant.....each, 2 25

PUNCHES.

Conductors'.
No 22.....per doz $2 25
Machine.....per lb 10
Saddlers'.
Common.....per doz 60c@70c
Good..... " 72c@84c

PUTTY.

In Bladders.
Strictly pure.....per 100 lbs. 2 25

RAIL.

Barn Door.
Matchless, 1-in..... 3 c
Matchless, 1½-in..... 3½
Storm King..... 4 c
Sliding Door.
Painted steel.....per ft. 4½
Bronzed wrought iron...per ft. 8½

RAKES.

Coal or Wood.....per doz. $5 25
Garden.
Steel.....70%
Steel, bow.....70%
Malleable iron, heavy.....60&10%
Hay.
Wood.....$1 50@$2 00
Lawn—Wood.
XXX.....per doz. $3 00
Automatic..... " 5 25
Lawn Queen..... " 2 75
Jumbo, 36 teeth..... " 5 25

RASPS—See Files.

RAZORS.

Bo-ras-ic.....50%
Red Devil.....50%
Tree Brand.....50%

REGISTERS.

(All Sizes)

Japanned, Bronzed and Plated...70%
White Porcelain Enameled...50&10%
Solid Brass and Bronze Metal....40%
Single Valve (Baseboard and Sidewall).....70&10%

REGISTER FACES

Japanned, Bronzed and Plated
4x6 to 14x14.....70%
14x14 to 36x42.....75&10%

Heavy Round Gratings.....75&10%
White Porcelain Enameled.....50&10%
Solid Brass or Bronze Metal.....40%

RINGS.

Bull.

Copper	2½ in.	3in.
Per doz.	$1 10	$1 40
Rea's Improved Self-Piercing copper, pr doz	2 00	....
Steel, per doz.	35	45
Nickel plated	1 35	....

and Ringers—Hog.
Blair's Rings.....per doz. $0 50
Blair's Ringers..... " 75
Brown's Rings..... " 50
Brown's Ringers..... " 80
Champion Ringers.... " 1 00
Hill's Ringers..... " 70
Hill's Ring, boxes.... " 47
Major Rings..... " 60
Perfect Ringers..... " 95
Wolverine Rings..... " 1 40
Wolverine Ringers.... " 80
Fruit Jar.
White.....per lb.....30c
Key.
Split, round.....per doz. $0 17
Split, square..... " 22
Ball, round..... " 23

RIVETS.

and Burrs.
Copper Belt.....40%
Coppered Iron.....60&10&5%
Tinners'.....60&10%
Hame.....per lb. $0 10
Slotted Clinch per doz 40c@45c
Tubular
Nos 1 and 2 assorted sizes, doz, 45c

RIVET SETS.

See Sets.

ROPE.

Cotton.
¼, 5-16 in. Cem on reels. per lb. 11½c
¼, 5-16 in Com. in coils.. " 12 c
¼, 5-16 Imperial in coils.. " 21 c
Sisal.
1st Quality.....12 c
Hardware Grade, rates, per lb...10 c
Pure Manila.
1st quality.....per lb. 15½c
Hardware Grade, rates... " 14½c

RULES.

Boxwood.....50&10%
Ivory.....

SASH WEIGHTS.

See Weights.

SAWS.

Back.
Disston's.....25%
Jackson's.....25%
Butchers'.
Disston's.....30%
Circular.
Disston's.....50%
Hiles'.....50&10%
Compass.
Common.....per doz $1 35@1 00
Disston's .....%25
Cross-Cut
Disston's.....45%
Dehorning.
Disston's.....per doz. $5 75
Hack.
Disston's.....25%
Keystone.....30%
Hand and Rip.
Brown's.....30%
Disston's No. 7.....30%
Disston's Nos 8, D8, 12, 76, 112, D100, and 120 (new list).....25%
Keystone.....30%
Enterprise, hand.....per doz. $5 00
Our Saw, hand..... " 4 00
Our Saw, rip..... " 4 00
Keyhole—Disston's.....25%
Kitchen.
Sterling.....25%
One Man.....50%
Panel
Brown's.....30%
Disston's No. 7.....30%
Disston's No. D100.....25%
Pruning.
Brown's.....25%
Disston's.....25%
Wood
Common.....per doz. $4 50
Clover Leaf..... " 6 00

SAW BUCKS—See Bucks.

SAW SETS—See Sets.

SAW TOOLS—See Tools.

SAW FRAMES.

Common, plain.....per doz. $1 25
Common, painted..... " 1 70

SCALES.

Counter.
Pelouze.....40&10%
Platform.
Osgood.....50%

SCOOPS.

Grain.
½-bu. "Hercules".....per doz. 18 70
1-bu. "Hercules"..... " 15 00

SCRAPERS.

Box.
Triangular.....per doz. $4 00
Cabinet.
Cast Steel.....per doz, 60c@75c
Road.

Cubic ft.	7	5	3
Without run's, ea.	$4.00	3.75	3.50
With runners, ea.	4.25	4.00	3.75

SCREWS.

Bench.

Iron, in.	1	1½	1¾
	$3.50	4.00	4.75

Wood, white maple...per doz. $3 50
Hand—Wood.....10%
Hand Rail.....80&10%
Jack.....70&10&5%
Lag or Coach—all sizes, gimlet pointed.....75&5%
Screw—Centennial

Nos	1	2	3	4	5	6
Per doz.	18c	20c	20c	22c	23c	25c

Wood.
F. H. Bright.....87½&5%
R. H Blued.....85%
F. H. Jap'd.....82½%
F. H. Brass.....85%
R. H. Brass.....80%
R. H. Nickel Plated.....75-10%

SCYTHES.

Be Ve Be, grass.....per doz. $8 00
Clipper, grass..... " 8 25
Clover Leaf Dutchman. " 7 50
Honest Dutchman..... " 7 50
Be Ve Be..... " 7 50

SHAVING SETS.

Smith & Hemenway.....60%

SETS.

Nail.
Round, common.....per doz. $0 33
Square, common..... " 42
Octagon, common.... " 33
No. 5, square..... " 75
Cup point, knurled... " 75
Rivet.
Farmers'.....per doz. $1 20
Tinners'.....50&10%
Saw.
Aiken's Pattern.....per doz. $3 50
Common Lever..... " 1 20
Disston's Monarch.... " 6 50
Disston's X Cut ..... " 12 00
German..... " 1 05
Leach's..... " 50
Nash's Hand..... " 3 15
Nash's X Cut..... " 4 20
Stillman's Lever..... " 1 20
Stillman's X Cut..... " 2 50

SHARPENERS, SKATE.

Diamond.....per doz $1 00
Smith & Hemenway 20%

SHAVES, SPOKE

Iron.....per doz $1 10@1 85
Wood ..... " 2 75@4 75
Bailey's .....50&5%
Goodell's 15%

SHEARS

Pruning
Buckeye, No. 1.....per doz $5 75
Buckeye, No. 2..... " 7 40
California Pat., 9-in.. " 3 20
California Pat., 10-in.. " 4 00
Draw Cut, No. 2..... " 13 75
Draw Cut, No. 4..... " 16 50
Henry's Pat. 0 01 14 012
Per doz.....$1.40 2.10 2.90 2.80
Star.....per doz $4 00
Sheep—No BBA.
Inches..... 6 6½ 7
Reg. Grip.....$11.25 11.50 12.00
Nar. Grip.,doz.... 11.00 11.25 12.25
Tinners'—See Snips.

SHEAVES, SLIDING DOOR.

Common.
Inches..... 3 4 5
Per set..... $0.34 .42 .70
Hatfield's.
Per set..... $0.75 1.00 1.00

SHELLS—See Ammunition.

SHELLERS, CORN.

Union.....per doz. $6 75

SHIELDS.

Expansion Bolt Shields.....50&10%

SHOES.

Conductor.....60&10%

SHOT—See Ammunition.

SHOVELS AND SPADES.

Coal.
No 2 Woodford.....per doz. $5 50
No. 182..... " 6 00
Ames' new list .....Discount, 12½%
Per doz.
Neverbreak, hollow bck, blk. $15 75
National.... " " " 14 75
Buckeye.... " " " 10 00
Mohawk.... " " " 9 00
Drain.
Iwan's Perfection.....50%
Railroad, etc.
Black Diamond.....per doz. $1 50
Crescent..... " 5 75
Keystone..... " 8 75
Star..... " 4 75
Vaterland..... " 9 50
Hollow Back..... " 4 75
Ames, new list .....Discount, 12½%
Snow.
Per dos.....$1.65@$9.00
Alaska Steel.
D Handle.....per doz. $3 50
Long Handle..... " 3 00

SINKS.

Cast Iron.
Painted.....50&10%
Enameled, White.....50&10%
Wrought Steel.
Painted, new list.....40-10&5%

SLEDGES—See Hammers.

SNAPS, HARNESS.

Champion.....33⅓%
German Pattern.....30&5%
Judd's Pattern.....50%

SNATHS.

Double Ring, Bush.....per doz. $6 00
Patent Loop, Bush..... " 5 75
Patent Loop, Grass..... " 5 50

SNIPS, TINNERS'.

Clover Leaf.....40&10%
National.....40&10%

SOLDER—See Metals.

SPRINGS, DOOR.

Perfect.
Nos..... 1 2 3 4
Per doz.....30c 35c 40c 54c

Reliance.
Per dos ... light, $1.25; heavy, $2 50
Star.
Per dos .... light, 90c; heavy, $1 35
Torrey's.....per doz. $1 35
Warner's No..... 11 13
Per doz..... 75c $1 35

SQUARES.

Steel and Iron.....70&10%
(Add for bluing, $2.50 per doz., net.)
Mitre.
Try.
Try and Bevel.
Try and Miter.
Fox's.....per doz. $5 75
Winterbottom's.....70%

SQUEEZERS, LEMON.

Common Wood.....per doz. $0 70
Porcelain Lined, Wood. " 1 20
Boss, malleable iron.... " 1 20
Iron Frame, porc'n bowl " 1 90
Iron Frame, glass bowl . " 2 35
Little Giant, tin'd iron . " 4 00
Drum, japanned..... " 3 60
Drum, nickel plated ... " 4 50

STAPLES

Blind.
Barbed.....per lb ..9¼@9½c
Butter Tub..... " .....8 @8½c
Fence—less than carload.
Polished.....per 100 lbs. $2 30
Galvanized..... " 2 60
Netting.
Galvanized.....per 100 lbs. 4 00
Wrought.
Wrought Staples, Hasps and Staples, Hasps, Hooks and Staples, and Hooks and Staples.....60-10&10%
Extra heavy.....75&10%

STEELYARD.

Discount 25%.

STONES.

Axe.
Hindostan .....per lb 5½@7 c
More Grit..... " 9½c
Washita ..... " 17 c
Emery.....60% @60&5%
Oil—Mounted.
Arkansas Hard.....per dos.$23 00
Arkansas Soft..... " 15 50
Hindostan .....per lb 6½@6½
Oil—Unmounted.
Arkansas Hard.....per lb $2 05
Arkansas Soft ..... " 1 10
Lily White..... " 45
Queer Creek..... " 15
Ouachita..... " 38
Washita..... " 38
Sythe.
Black Diamond.....per gro. $8 00
Crescent..... " 4 25
Gem Corundum..... " 7 50
Green Mountain..... " 4 50
La Moille ..... " 7 00
Quinnebog..... " 5 00
Red End ..... " 3 75

STOPS, BENCH.

Hotchkiss'.....per dos. $3 50
Stearns'..... " 4 75

STOPPERS, FLUE.

Common.....per dos. $0 40
Crown..... " 45
Gem, flat, painted..... " 85
Gem, cor'd, decorated... " 70
Kirch's..... " 90
Perfect..... " 70@85
Skinner's Common Sense " 60

STOVE PIPE—See Pipe.

STOVE BOARDS—See Boards

STOVE POLISH—See Polish.

STRAPS.

Scoop.....per dos prs., $1 85
Skate..... " " 60@70c

STRETCHERS.

Carpet.
Bullard's.....per dos. $2 00
Excelsior..... " 5 25
Malleable Iron..... " 70
Perfection..... " 6 30
King..... " 4 50
Wire.
N. S. Elwood's.....per dos. $6 00
O. S. Elwood's..... " 6 00
Little Giant..... " 5 75
Safety..... " 10 00
Star Lever..... " 6 25
Canton Tackle Block. " 9 50
Warner's ..... " 6 25

SWIVELS.

Malleable Iron.....per lb. $0 70
Wrought Steel.....per gro. 4 00

TACKS.

American Cut.....80&15%
American Wire.....85&20%
Bill Posters Cut.....80&20%
Blued Carpet.....80&10%
Tinned Carpet.....80&10%
Gimp.....80&10%
Upholsters' Cut.....80&20%
Upholsters' Wire.....80&10%
Double Pointed.....80%
Copper.....per lb. 6 22c
Canvas Nails.....75&5%
Clout Nails.....75&10%
Hungarian Nails.....80%

TAPES, MEASURING.

Asses' Skin.....40&10%
Bend Leather.....30%
Patent Leather.....30%
Lufkin's Steel.....35%
Lufkin's Metallic.....30%

TEE BEVELS—See Bevels.

THERMOMETERS.

Tin Case.....per dos. 80c@$1 25
Wood Back..... " $2.00@12 00
Glass..... " 12 00

TIES.

Bale.
Single Loop.....80&5%
All other kinds.....70%
Cow—See "Chains."

TOOLS, SAW.

Disston's Universal.....40%
Miniature.
Smith & Hemenway.....25%

TRAPS.

Fly.
Ballou.....per dos. $1 25
Harper's..... " 1 25
Game.
Newhouse.....40&10%
New Victor.....70&10%
Mole.
Reddick's.....per dos. $6 00
Mouse and Rat.
Wood Choker ..per dos. holes $0 13
Tin Choker..... " " 75
Delusion.....per dos. 1 15
Marty Rat..... " 6 25
Marty Rat Imitation. " 3 50
Marty Mouse..... " 3 00
Marty Mouse Imitation " 2 00
Hold-em, wire rat.... " 3 75

TROWELS.

Brick.
Clover Leaf.....30%
Brade's.....15&5%
Disston's.....30%
Rose's.....20%
Plasterers'.
Clover Leaf.....40%
Disston's.....25%
W. & McP.....25%

TRUCKS.

Bag.....each, $2 75
Handy ..... " 1 85
Warehouse.....50&10%
No..... 1 2 3
Half Ironed..... $3.00 3.85 5.50
Full Ironed..... 3.45 4.50 6.45

TUBS, WASH

Standard, Wood.				Ex.
Nos.....	3	2	1	large
Per dos.....	$5.00	6.00	7.00	9.50
Dowell.				
Per dos.....	5.35	6.35	7.00	9.50
Cedar.				
Per dos.....	6.10	7.10	7.90	10.80
Indurated.				
Per dos.....	8.55	9.45	10.80	13.50
Galvanized.				
No.....	1	2	3	
Per dos.....	$6.00	6.75	7.75	

TWINE.

	Per lb.
4-ply Cotton Wrapping	25c
4 " " "	25c
" " Extra Wrapping.....	27c
4 " " " Hvy. Wrapping	25c
4 " " Wrapping on tubes....	27c
3 " " " " cones.....	25c
4 " " " " "	25c
India Hemp, ½-lb. balls	19c
" " ½-lb. "	18c
" " ½-lb. " .....doz.	75c
2-ply Jute, ½-lb. "	14c
3-ply Jute, ½-lb. "	13c
Jute Wrapping, ½-lb. balls.....	14c
Jute Wool, 1-lb. balls.....	9½c

Seine.				
Nos.....		9	12	15
Soft.....	per lb	26½	26	25
Med.....	"	26½	26	25
Hard.....	"	27	26½	26
Staging, ½-lb. ball, size		21		26½c
" " " "		24		26c
" " " "		27		26c
Bagging " "				23c
3-ply "B" in hanks				18c
4 " "B" "				18c
2 " "A" "				27c
3 " Silver Finish, in hanks				37c

Fodder or Lath.
130 strand.....6½c
200 strand.....—c

VISES.

Phoenix.....30%
Phoenix Oval Slide.

Inches.....	2½	3	3½	4½
Each.....	$1.25	1.50	1.85	2.75

Parker's Parallel.....18&20%
Parker's Victor.....15%
Parker's Combination.....75%
Solid Box.....40&5%
Adams' Mechanics'.....each 2 50
Williamson's Universal.....60%

WARE.

Stove Hollow Ware.
Plain or Unground.....50%
Ground Ware.....45%
Enameled Ware.....33⅓%
Country Hollow Ware, per 100 lbs. $3 00
White Enameled Ware.
Maslin Kettles.....60&10%
Covered Ware.
Tin'd and Turn'd.....35&10%
Enameled.....45&10%
Glue Pots.
Tinned.....25%
Enameled.....30%
Enameled.
Cherry Blossom and Chrysolite..50%

WASH BOARDS—See Boards.

WASHERS.

Standard O G. cast iron . . .per lb. 2½c
Wrought iron in bulk, per lb.:

In.	½	⅝	¾	⅞	1	1⅛	1¼
	9c	6½c	5c	4½c	4½c	4½c	3½c

Wrought steel in 5-lb. boxes, per lb.:

In.	½	⅝	¾	⅞	1	1⅛	1¼
	10c	7c	6c	5½c	5c	5c	4½c

WASHING MACHINES—

See Machines.

WEDGES.

Ax.....per doz. $0 30
Felling.....per lb. 10½
Saw..... " 8½

WEANERS.

Calf.
Puller's, per dos.....$2 00 to $2 50
Tyler's Safety, per doz 1 85 to 2 40
Carroll's, per doz..... 3 00 to 3 75
Standard, per doz..... 3 00
Hoosier, per doz..... 3 50 to 4 00

WEIGHTS.

Hitching.....per lb. 2½c
Sash—f.o.b Chicago....pr ton, 26 50

WHEEL BARROWS.

Common Railroad.....per doz. $17 00
Heavy Railroad..... " 24 00
Panama Steel Tray.... " 30 00
Klondike Steel Tray.. " 28 00

WHEELS.

Corundum.....70&10&5%
Emery.....75&5%
Well. Inches.. 8 10 12 14
Per dos..... $2.40 3.25 4.00 6.00

WIRE.

Barbed.	Painted.	Galv'd
Carloads .. per 100 lbs.	$2.33	$2 63
Less than car "	2.43	2.73

Brass.
In coils.....20%
In 1-lb. spools, new list.....50%
Broom—Tinned . . . 60&10&10&10%
Cable—Same price as Barbed Wire.
Copper.
In coils.....20&10%,33⅓%
1-lb. spools, new list.....50&10%
Fence—Smooth.
Nos. 6 to 9, An'eal'd, pr 100 lbs. $2 30
Nos. 6 to 9, Galv'd.. " 2 60
Hair—New List.....50%
Market.
Bright, full bdles.....70&5%
Bright, broken bdles.....70%
Coppered, full bdles.....70%
Coppered, broken bdles.....65&10%
Tinned, full bdles.....75&5%
Tinned, broken bdles.....65&10%
Picture—In coils .... 80% @80&10%
In 5-lb. spools.....per lb.....26c
Plain—Small lots..... $2 10
Car lots..... 2 05
Small spools 5c per 100 higher.

WRENCHES.

Acme Standard.....60%
Alligator No. 1.....85cnet
Always Ready.....50%
Agricultural.....75&5%
Ellis Adjustable.....25%
Malleable "S".....per lb. 08c
Malleable..... " 08c
Stillson Pipe.....70%

WRINGERS.

No. 22, Guarantee....per doz. $32 50
No. 110, Guarantee.... " 32 50
No. 110, Brighton..... " 23 50
No. 110, Bicycle..... " 31 50
No. 500, Royal..... " 32 50
No. 350, Universal..... " 28 00
No. 300, Novelty..... " 28 00
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Boynton Furnace Co., Chicago, Ill
Kellogg-Mackay-Cameron Co., Chicago, Ill

Boilers—Wash

Atlantic Stamping Co., Rochester, N.Y

Boiler Handles

Berger Bros. Co., Philadelphia, Pa

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Green Co., A. H., New York

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Niagara Machine & Tool Works, Buffalo, N. Y
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Brass and Copper

Hussey & Co., C. G., Pittsburg, Pa

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Bromwell Brush & Wire Goods Co., Cincinnati, O

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Zucker & Levett & Loeb Co., New York

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Stuber & Kuck, Peoria, Ill

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Pullman Mfg. Co., Rochester, N. Y
Smith & Hemenway Co., New York, N.Y

Carriage Forgings

Columbus Bolt Works, Columbus, O

Ceilings

Berger Mfg. Co., Canton, O
Burton, W. J. Co., Detroit, Mich
Canton Art Metal Co., Canton, O
Canton Mfg. Co., Canton, O
Eller Mfg. Co., Canton, O
Foster, & Sons Co., Wm. Springfield, Ill
Friedley-Voshardt Co., Chicago, Ill
Keighley Met. Ceiling Co., Pittsburg, Pa
Milwaukee Corrugating Co., Milwaukee, Wis
Wheeling Corrugating Co., Wheeling, W. Va

Cement—Plumbers

Obermayer, Co., S. Cincinnati, O

Cement—Roofing

Auld & Conger Co., Cleveland, O
Conners, Wm. Paint Mfg. Co., Troy, N. N

Chimney Caps

Sterling Foundry Co., Sterling, Ill

Chimney Tops

Iwan Bros., Streator, Ill
Sterling Foundry Co., Sterling, Ill

Coil Springs

Pullman Mfg. Co., Rochester, N.Y

Conductor Hangers

Berger Bros. Co., Philadelphia, Pa

Conductor Pipe

Badger Steel Roofing & Corrugating Co., La Crosse, Wis
Berger Mfg. Co., Canton, O
Canton Art Metal Co., Canton, O
Canton Mfg. Co., Canton, O
Clark, Quien & Morse, Peoria, Ill
Eller Mfg. Co., Canton, O
La Crosse Steel Roof. Co., La Crosse, Wis

Conductor Pipe Machinery

Armor-Clad Mfg. Co., Canton, O

Copper and Brass

Hussey & Co., C. G., Pittsburg, Pa

Core Compound

Obermayer Co., S., Cincinnati, O

Corn Cribs

Denning Wire & Fence Co., Cedar Rapids, Ia

Cornices

Badger Steel Roofing & Corrugating Co., LaCrosse, Wis
Berger Mfg. Co., Canton, O
Canton Art Metal Co., Canton, O
Canton Mfg. Co., Canton, O
Eller Mfg. Co. Canton, O

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Bertsch & Co., Cambridge City, Ind
Niagara Machine & Tool Wks., Buffalo, N. Y.
Robinson, Mfg. Co., J. M., Cincinnati, O

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Henkel Mfg. Co., The, Can 1 Dover, O
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Milwaukee Corrugating Co., Milwaukee, Wis
Sullivan-Geiger Co., The Indianapolis, Ind.

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Taylor & Boggis Fdy. Co., Cleveland, O

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Gatchel & Manning, Philadelphia, Pa

Door Hangers

Griffin Mfg. Co., Erie, Pa
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Caldwell Mfg. Co., Rochester, N. Y

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Badger Steel Roofing & Corrugating Co., La Crosse, Wis
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Canton Mfg. Co., Canton, O
Eller Mfg. Co., Canton, O
La Crosse Steel Roof Co., La Crosse, Wis
Milwaukee Corrugating Co., Milwaukee, Wis
Whitacre, J. E. Mfg. Co., Rockford, Ill
Wheeling Corrugating Co., Wheeling, W. Va

Eave Trough Hangers

Canton Mfg. Co. Canton, Ohio
Century Specialty Co., Rochester, N. Y

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Canton Art Metal Co., Canton, O
Canton Mfg. Co., Canton, O
Dieckmann, Ferdinand, Cincinnati, O.
Eller Mfg. Co., Canton, O
Milwaukee Corrugating Co., Milwaukee, Wis.
Wheeling Corrugat'g Co., Wheeling, W. Va

Electro & Nickel Plating Outfits

Zucker & Levett & Loeb, New York, N.Y

Elevators

Kimball Bros. Co. Council Bluffs, Ia

Enameled Ware

Star Enameling & Stamping Co., Pittsburgh, Pa

Engravings

Gatchel & Manning, Philadelphia, Pa

Fencing—Wire

American Steel & Wire Co., Chicago, Ill
Denning Wire & Fence Co., Cedar Rapids, Ia
Eureka Fence Mfg. Co., Richmond, Ind
Pittsburgh Steel Co., Pittsburgh, Pa

Files

Carver File Wks, Philadelphia, Pa
Disston, Henry & Sons, Philadelphia, Pa

Fixtures—Store

Warren Mfg. Co., J. D., Chicago, Ill

Food Choppers

Enterprise Mfg. Co. of Pa. Philadelphia, Pa.

Forming Rolls

Armor-Clad Mfg. Co., Canton, O
Bertsch & Co., Cambridge City, Ind
Niagara Machine & Tool Works, Buffalo, N. Y

Foundry Supplies

Obermayer, S. Co., Cincinnati, O

Fuel Chutes

Sterling Foundry Co., Sterling, Ill

Furnace Cement

Connors Paint Mfg. Co., Wm., St. Louis, Mo

Furnaces—Hot Air

American Furnace Co., St. Louis, Mo
Bonnot Co., The Canton, Ohio
Boynton Furnace Co., Chicago, Ill
Floyd-Wells Co., The, Chicago, Ill and Royersford, Pa
Green Fdy. & Furn. Wks., Des Moines, Ia
Haynes-Langenberg Mfg. Co., St. Louis, Mo
Henry & Scheible Co., Cleveland, O
Hess-Snyder Co., Massillon, Ohio
Kelsey Heating Co., Syracuse, N. Y
Monroe Fdy. & Furn. Co., Monroe, Mich
Schwab, R. J. & Sons Co., Milwaukee, Wis
Stove & Range Co. of Pittsburgh, Pittsburgh, Pa
Tubular Heating & Ventilating Co., Philadelphia, Pa
Youngstown Furn. & Supply Co., Youngstown, O

Furnaces—Soldering

Burgess Soldering Furnace Co., Columbus, Ohio
Clayton & Lambert Mfg. Co., Detroit, Mich
Diener Mfg. Co., Geo. W., Chicago, Ill
Turner Brass Works, Sycamore, Ill

Furnace Pipe and Fittings

Green Fdy. & Furn. Wks., Des Moines, Ia
Michigan Safety Furnace Pipe Co., Detroit, Mich

Furnace Rings

Walworth Run Fdy. Co., Cleveland, O

Galvanized Ware

Atlantic Stamping Co., Rochester, N.Y
Wheeling Corr. Co., Wheeling, W. Va

Gas Stoves

Stove & Range Co. of Pittsburgh, Pittsburgh, Pa

Gates

Eureka Fence Mfg. Co., Richmond, Ind

Glass Cutters

Goodell-Pratt Co., Greenfield, Mass

Grain Bins

Denning Wire & Fence Co., Cedar Rapids, Ia

Hangers—Garment

Pullman Mfg. Co., Rochester, N.Y

Hardware Jobbers

Clark, Quien & Morse, Peoria, Ill
Paxton & Gallagher Co., Omaha, Neb

Hardware Specialties

Butler Bros., Chicago, Ill
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Paxton & Gallagher Co., Omaha, Neb
Pullman Mfg. Co., Rochester, N. Y
Smith & Hemenway Co., New York, N. Y
Taylor & Boggis Foundry Co. Cleveland, Ohio
Welland, Chas., New York, N. Y

Heaters—Hot Water

Detroit Heating & Lighting Co., Detroit, Mich
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Griffin Mfg. Co., Erie, Pa
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Hollow Ware

Avery Stamping Co., Cleveland, O
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Standard Horse Nail Co., New Brighton, Penna

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Lenox Hotel Buffalo, N. Y

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American Steel & Wire Co., Chicago, Ill

Ice Cream Freezers

North Bros. Mfg. Co., Philadelphia, Pa
Reid-Edelmuth Mfg. Co., Brooklyn, N. Y

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Gatchel & Manning, Philadelphia, Pa

Iron Enamel
Black Silk Stove Polish Works, Sterling, Ill
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Atlantic Stamping Co., Rochester, N.Y
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Republic Metalware Co., Rochester, N.Y
Star Enameling and Stamping Co., Pittsburgh, Pa

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Pritchard-Strong Co., Rochester, N.Y

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Brilliant Gas Lamp Co., Chicago, Ill

Lard Presses
Enterprise Mfg. Co. of Pa. Philadelphia, Pa

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Baker-McMillen Co., Akron, O

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Brilliant Gas Lamp Co., Chicago, Ill
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Lightning Rod
Barnett & Co., Jos., Riverside, Ia
Foy, Edw. A. & Co., Cincinnati, O
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Metal—Perforated
Harrington & King Perforating Co., Chicago, Ill

Metal Polish
Black Silk Stove Polish Works Sterling, Ill
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Metal Shingles
Burton, W. J. Co., Detroit, Mich
Canton Art Metal Co., Canton, O
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Pritchard-Strong Co., Rochester, N. Y
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Hussey & Co. C. G., Pittsburg, Pa

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Harrington & King Perforating Co., Chicago, Ill

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Armstrong-Blum Mfg. Co., Chicago, Ill
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Griffiths Charcoal Iron Mills, Philadelphia, Pa
Ward-Dickey Steel Co., Indiana Harbor, Ind

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Canton Art Metal Co., Canton, O
Eller Mfg. Co. Canton, O
Sykes Steel Roofing Co., Chicago, Ill

Skylight Gearing
Sykes Steel Roofing Co., Chicago, Ill
Weiss, H. & Co., New York, N.Y

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Ruby Chemical Co., Johnston, Ohio
Solderene Co., The Boston, Mass

Squares, Machinists'
Disston, Henry & Sons, Philadelphia, Pa

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Avery Stamping Co., Cleveland, O

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American Steel & Wire Co., Chicago, Ill

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Foster Stove Co., The, Ironton O
Lansdale Steel Range Co., St. Louis, Mo
Paxton & Gallagher, Omaha, Neb
Quality Stove & Range Co., Belleville, Ill
Stove & Range Co. of Pittsburgh, Pittsburgh, Pa.
Van, John, Range Co., Cincinnati, O

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Stuber & Kuck, Peoria, Ill

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Cleveland Castings Pattern Co., Cleveland, O
Cope Pattern, Geo. W. Wks., Detroit, Mich
Quincy Pattern Co., Quincy, Ill
Vedder Pattern Works, Troy, N Y
Weller Pattern Co. Quincy, Ill

Stove Pipe
Hemp & Co., St. Louis, Mo

Stove Pipe Thimbles
Stuber & Kuck, Peoria, Ill

Stove Polish
Black Silk Stove Polish Works, Sterling, Ill.
Nickel Plate Stove Polish Co., Chicago, Ill

Stove Putty
Connors Paint Mfg. Co., Wm., St. Louis, Mo
Dixon, Jos. Crucible Co., Jersey City, N. J

Stove Repairs
Brauer, A. G., Supply Co., St. Louis, Mo
Manufacturers Stove Repair Co., Chicago, Ill

Sugar Kettles
Sperry, D. R. Co., Batavia, Ill

Supplies—Foundry
Obermayer Co., S., Cincinnati, O

Supplies—Stove Dealers'
Brauer, A. G., Supply Co., St. Louis, Mo

Tapes
Lufkin Rule Co., Saginaw, Mich

Technologist
Hooper, C. N. Dubuque, Iowa

Thermometers—Oven
Evans Stamping & Plating Co., Taunton, Mass

Tin—Perforated
Harrington & King Perforating Co., Chicago, Ill

Tinners' Furnaces
Burgess Soldering Furnace Co., Columbus, Ohio
Clayton & Lambert Mfg. Co., Detroit, Mich
Dixon, Geo. W. Mfg. Co., Chicago, Ill
Turner Brass Works, Sycamore, Ill

Tinners' Tools
Armor-Clad Mfg. Co., Canton, O
Armstrong-Blum Mfg. Co., Chicago, Ill
Auld & Conger Co., Cleveland, O
Berger Bros. Co., Philadelphia, Pa
Bertsch & Co., Cambridge, Mass
Bicknell Mfg. & Supply Co., The Janesville, Wis
Lufkin Rule Co., Saginaw, Mich
Niagara Machine & Tool Works, Buffalo, N. Y
Robinson Mfg. Co., J. M., Cincinnati, O
Smith & Hemenway Co., New York N. Y
Wagner, C. DeWitt, Cedar Rapids, Ia
Weiss & Co., H., New York, N.

Tinplate
American Sheet & Tin Plate Co., Pittsburg, Pa
Eller Mfg. Co. Canton, O
Follansbee Bros. Co., Pittsburgh, Pa
Merchant & Evans Co., Philadelphia, Pa
Wheeling Corrugating Co., Wheeling, W. Va

Tinware Trimmings
Berger Bros. Co., Philadelphia, Pa
Butler Bros., Chicago, Ill

Tools, Etc.
Goodell-Pratt Co., Greenfield, Mass
North Bros Mfg. Co. Philadelphia, Pa
Perfection Wrench Co., Port Chester, N. Y

Tools—See Carpenters' Tools

Tools—Linemen's
Smith & Hemenway, New York, N.Y

Trowels
Avery Stamping Co., Cleveland, O
Disston, H. & Sons, Inc., Philadelphia, Pa
Griffin Mfg. Co., Erie, Pa

Tubing—Heavy Tin
Dieckmann, Ferdinand, Cincinnati, O

Ventilators
Berger Mfg. Co., Canton, Ohio
Canton Art Metal Co., Canton, O
Canton Mfg. Co., Canton, O
Eller Mfg. Co., Canton, O
Friedley & Voshardt, Chicago Ill
Globe Ventilator Co., Troy, N.Y
Iwan Mfg. Co., Streator Ill
Merchant & Evans Co., Philadelphia, Pa
Pullman Mfg. Co., Rochester, N. Y
Sterling Foundry Co., Sterling, Ill
Sykes Steel Roofing Co., Chicago, Ill
Uno Ventilator Co., Lynn, Mass

Vises
Goodell-Pratt Co., Greenfield, Mass

Washers
Columbus Bolt Works., Columbus, O

Washing Machines
Brammer, H. F., Mfg. Co., Davenport, Ia
Knoll, Jas. H., Reading, Pa
White Lily Mfg. Co., Davenport, Ia

Wire
American Steel & Wire Co., Chicago Ill
National Wire Cloth Co., Niles, Mich

Wire Goods
Bromwell Brush & Wire Goods Co., Cincinnati O
Deming Wire & Fence Co. Cedar Rapids, Ia
National Wire Cloth Co., Niles, Mich
Pittsburgh Steel Co., Pittsburgh Pa

Wrenches
Perfection Wrench Co., Port Chester, N. Y

Wants and Sales

For Paid Yearly subscribers THE AMERICAN ARTISAN will insert under this head advertisements of six lines WITHOUT CHARGE for employers wishing to secure employes, persons seeking situations, parties desiring to purchase a business, businesses for sale, partners wanted, to exchange, etc. Those who respond to these announcements will please mention that they "READ THE ADVERTISEMENT IN THE AMERICAN ARTISAN."

BUSINESS CHANCES.

PATENTS HUBERT E. PECK 622 F. STREET, N. W. Washington, D. C. Consulting Expert in Patent Causes. U. S. and Foreign Patents. Send for leaflet on "Rejected Patent Applications."

For Exchange—Farm of 106 acres in Shelby Co., Illinois, for stock of goods to invoice $3,000 to $4,000; or would travel for some good house. Address L-59, care THE AMERICAN ARTISAN, 355 Dearborn St., Chicago, Illinois. 23-3t

Wanted to Invest—About $2,500 in Hardware in good Western town by man with 30 years' experience in hardware, plumbing and tinning business. Address L-57, care THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. 23-3t

For Sale or Trade—If you have a good stock of hardware and stoves you wish to exchange for some good land, write "Wad," 416 South Main St., Clinton, Missouri. 22-3t

For Sale—Hardware stock in new town in North Dakota. Good clean stock; fine country with large territory. Good reasons for selling. About $3,500 cash required. Address L-53, care THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. 22-2t

For Sale—One Jarecki stock and dies with cutting off attachment, threads 1½, 2, 2½, 3-inch pipe; good as new. Cheap. Also two other smaller stocks. Address F. D. Burgess, Waupaca, Wisconsin. 20-3t

For Sale—3 No. 744 Portable Crusader Furnaces, 1 No. 740 Portable Crusader Furnace, made by Boynton Furnace Co., Chicago, Illinois. New, in original packages; in good condition. We are overstocked and will sell at a bargain. Address Cole's Hardware, Bethany, Missouri. 20-3t

For Sale—One large swage for heavy iron; one small swage; one 20-inch gutter beader; one Trimo chain wrench, capacity 6-inch pipe; one 24-inch Trimo wrench; one 18-inch Trimo wrench; one 14-inch Trimo wrench. Tools all in first-class condition; part of them new. Address E. L. Hyre, Saybrook, Illinois. 20-3t

TINNER'S TOOLS.

For Sale—1-17" grooving machine; 2 pair roofing tongs; one Peck Stow setting down machine, new; one small burring machine; one hatchet stake; 1-30" wood roofing folder. All of these tools are in first-class order. All for $20.00 F. O. B. this city. Address W. L. Peckham, Marshalltown, Iowa. 21-3t

For Sale—One set of P. S. & W. tinner's tools. All are 30-inch machines and new, including one O. K. steel brake, set of slitter's tools and brackets, good spring delivery wagon, etc. They are at Boston, Ohio, and will be sold at a greatly reduced price or will trade for merchandise of any kind so it is staple line. If trade would prefer stock in West, but will consider any place. Address E. E. Johe, Albuquerque, New Mexico. 20-3t

HELP WANTED.

Tinner Wanted—Young man, 25 to 40 years old. Must be sober and reliable. Roofing and furnace hand; man with plumbing and pipe fitting experience preferred. Steady employment. Address J. D. Wilson, Mason City, Illinois. 23-1t

Wanted—Tinner and furnace man. Must be German, also a good salesman and man of good habits. Address Cash Hardware Co., Cedar Bluffs, Nebraska. 23-3t

Tinner Wanted—By Christmas or sooner. One who is a hustler, honest and good appearance. Man for all kinds of work in country shop. Must clerk at times in store. Have good tools and shop and a good steady job. State wages wanted. Address H. A. Ebert, Alden, Minnesota. 22-3t

Wanted at Once—Good tinner, who can do some cornice work. Will pay good wages for a first-class man. Address W. B. Hayden & Sons, Cassopolis, Michigan. 22-3t

Wanted, Tinner—One good on outside and inside work. Must understand furnace work and ordinary plumbing pumps and pipe work. Position permanent; town of 2,000; must be temperate. Address L-56, care THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. 22-3t

Wanted—Reliable foreman for cornice shop doing a general line of sheet metal work. Address L-54, care THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. 22-3t

Tinners Wanted—Men with factory experience at making pieced tinware. State age, salary wanted and where formerly employed. Address Superintendent, Flat 3, 183 14th St., Milwaukee, Wisconsin. 21-3t

SITUATIONS WANTED.

Situation Wanted — By A-1 good all around tinner where good services are appreciated. Reliable, sober, steady, married man. You will not miss it if you are looking for a good mechanic. Small city or county seat preferred. Address L-58, care THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. 23-3t

Wanted Position—By a young tinsmith and pipe fitter with experience in all branches of tin work. A-1 references. Will go anywhere; prefers steady work. Address J. Clarkson, 1803 Olive St., St. Louis, Missouri. 23-1t (1888)

Situations Wanted—Two tin and sheet metal workers and furnace men would like positions in town of 10,000 or smaller. Can do plumbing, pump work and general jobbing. Nothing but steady positions wanted. State wages willing to pay to two honest and reliable men. Address Tinner, 342 E. 10th St., St. Paul, Minnesota. 23-3t

Situation Wanted—By good all around tinner and furnace man, with thirteen years' experience, where good service is appreciated. State wages. Address L-55, care THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. 22-3t

Situation Wanted—By reliable tinner where there is an opportunity to learn plumbing as is usually done in towns from one to five thousand. Address L-52, care THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. 21-3t

Situation Wanted—In wholesale or retail hardware store. Married man; 35 years old; 20 years' experience in the hardware business and fully understands the business in all its branches. Address H. T. McKnight, Alexis, Illinois. 21-3t

Situation Wanted—As salesman. Experienced in sheet metal, tinner's supplies and hardware sundries. Good will and confidence of trade in Ohio, Kentucky, Indiana and Illinois. Excellent credentials from past employers. Address Votary, care of 947 W. 8th St., Cincinnati, Ohio. 21-3t

Situation Wanted — By tinner of 22 years' experience. Prefers town near Chicago or the West; Missouri, Kansas or Oklahoma. Forty years old, strictly sober, honest and reliable. Would like position with firm that has hardware and stove store in connection with tinshop. Address L-51, care THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. 21-3t

SPECIAL NOTICES.

Stove Manufacturers and Jobbers

A gentleman of large experience selling stoves in the states of the middle West, would like a situation as sales manager, buyer or position that did not require constant travel. Address Employee, care THE AMERICAN ARTISAN, 355 Dearborn Street, Chicago, Ill. 20-4t

Situation Wanted

By first-class Stove Salesman of considerable ability with established trade in New Jersey, New York and Pennsylvania. In habit of calling on large trade. First-class reference. Address B-37, care THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. 19-ufn.

STOVE SALESMEN WANTED

We have openings for two first-class energetic men who are business getters, one of whom must be experienced in the sale of gas stoves. Address Blakesley-Tuttle Stove Co., Kansas City, Mo. 21-3t

Situation Wanted

A thorough and practical stove salesman of many years successful experience in the West and Northwest is desirous of representing a good line for the ensuing year where merit and good results will be appreciated. Address B-51, care THE AMERICAN ARTISAN, 355 Dearborn Street, Chicago. 21-3t

WANTED

Molding machines suitable for stove plate castings, Pridmore, Rockover and Farwell common tweezer styles desired. Address Molding Machine, care THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. 20-4t

Subscription Solicitors Wanted

WANTED—Agents to solicit subscriptions to the THE AMERICAN ARTISAN in every state in the Union. Can be handled as a side line by agents who sell stoves and sheet metal wares. Write for agent's terms and state what territory you can cover.

SUBSCRIBERS who can spare a few hours a week can make money on the side by soliciting subscriptions in their vicinity or among their fellow workers. Write for particulars.

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355 Dearborn St., Chicago

WANTED POSITION

As superintendent of Stove Manufacturing Plant, by a thoroughly competent man of many years experience, who would also if conditions warranted consider proposition of becoming interested financially. Address "Superintendent" care THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. 19-4t

Furnace

Salesman Wanted

Young and energetic man of experience in Middlewest territory by a well established manufacturer of a high grade line of furnaces. Must be a business getter and builder. No others need apply. State experience and salary expected. Address B-53, care THE AMERICAN ARTISAN, 355 Dearborn Street, Chicago. 21-3t

SPECIAL NOTICES.

SITUATION WANTED.

Experienced **stove, furnace and gas salesman**, sober, energetic, a business getter with good record to credit. Will consider change where opportunities may be improved. Greater opportunities and salary are the only considerations that will influence me. Address B-58, care of THE AMERICAN ARTISAN, 355 Dearborn street, Chicago. 23-1t

WANTED

A first-class salesman who is qualified to sell an A1 line of **Warm Air Furnaces** in the states of Ohio, Michigan and Indiana. One who has covered all or at least a part of this territory preferred. Enclose references and state age and experience. Address Syracuse Stove Works, Syracuse, N. Y. 23-3t

WANTED

A good furnace salesman to sell furnaces on commission. A good opportunity for the right man. Address B-57, care of THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. 23-1t

Wanted

A1 Stove Salesman for retail trade. Good steady position. State particulars and salary expected. Address Yakima Hardware Company, North Yakima, Washington. 23-3t.

We Want a Foreman

For our Wood and Iron Pattern Shop. The best man in the United States is the man we want, and we can make it interesting for this man. Our shop is located in an Eastern City and is occupied in the production of all kinds of heating and cooking apparatus. Address B-54, care THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. 22-5t

For Sale

One set of oak **Hardware Shelving,** 47 feet long, 11 feet 10 inches high; containing two sliding door wall cases with 48 tool hangers. 100 base drawers 24 inches long, 642 shelf boxes, one ladder and track and two nail bin counters to match. Photo and price upon request. Address W. B. Heller & Co., Montpelier, Ohio. 22-4t

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Good clean **Hardware Stock** with **Tinshop.** Located in one of the largest Wisconsin towns. Invoices about $4000. Splendid trade but sales can be doubled by devoting more time to the business. Owner has manufacturing interests which require his entire attention. Cash only. Address Retailer, care THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. 22-ufn

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¶ For Grates, Fenders, Mantels, Stove Pipes, Heating Drums, Registers, Coal Hods, Sinks, Oil Stoves, Gas Stoves, in fact for any purpose where a glossy and permanent enamel is desired. It will stand any degree of cold without chipping, and is not effected by heat, unless the article painted is brought in direct contact with flame heat. Brush for applying furnished with each can.

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The BEST Air Drying Iron Enamel Made.

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CHICAGO

Large 10 oz. Can.

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At once, a partner to finance my **patent, screwless door hinge** or will sell one-third right. The only thing of its kind on the market. One of the cheapest and best selling hinges manufactured. Address H. P. Squires, Corvallis, Montana. 23-4t

Situation Wanted

A first-class furnace and boiler salesman is open for an engagement. Acquainted with the trade in north half of Illinois, Northern Indiana and Southern Wisconsin. Address B-55, care THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. 22-2t

FOR SALE

Old established hardware, stove and furnace business in a growing city in western Indiana. Stock will invoice about $10,000. Fine location and favorable lease on building if wanted. Address H. P. Townley, Terre Haute, Indiana. 20-4t

WANTED

Young man of pleasing address and good health, experienced in corresponding and preferably conversant with wholesaling stoves. Position is with stove manufacturing concern forty miles from Chicago. State age, nationality, grade school or college education, married or single and salary expected. Address B-56, care THE AMERICAN ARTISAN, 355 Dearborn St., Chicago. 23-1t

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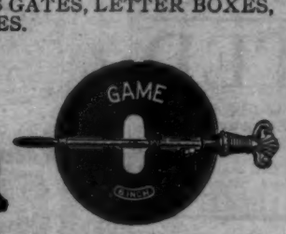

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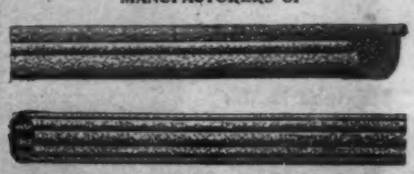
ALWAYS  **LEADS**

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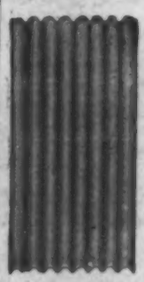

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See Page 13

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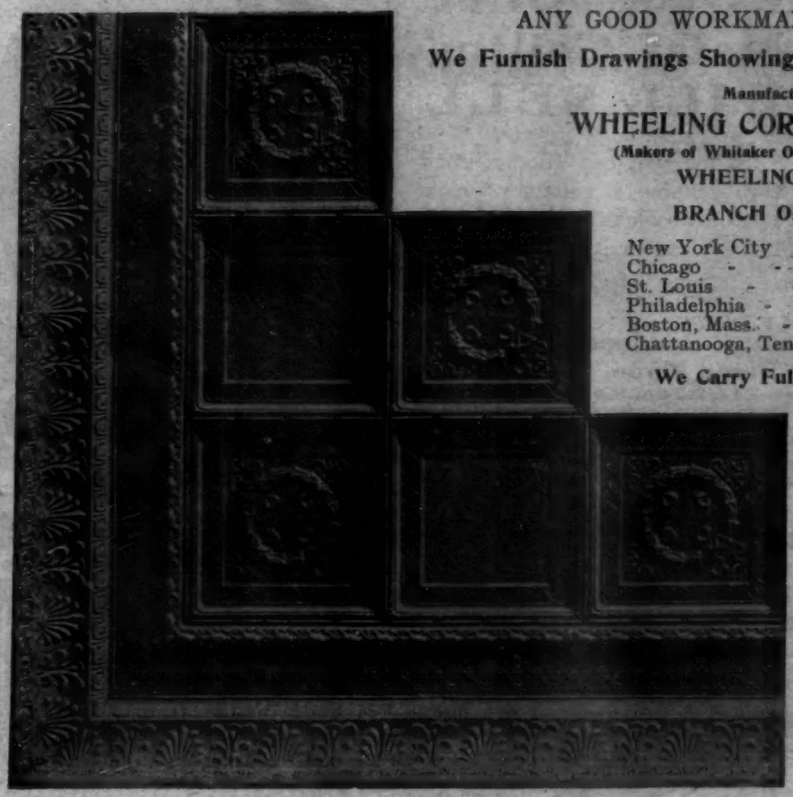

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TOP NOTCHER
40 lb. coating

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25 lb. coating

Two Points of Importance in their Manufacture

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Weight of Coating on Every Sheet

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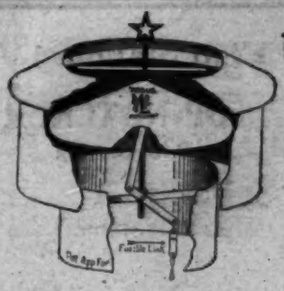

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Embody everything in the Best Scientific Storm Proof Ventilator.

MERCHANT'S METAL "SPANISH" TILES and "GOTHIC" SHINGLES.

These Tiles and Shingles have proved meritorious for years. They are in demand where ornamentation is essential. Also Lightness and Durability are special features of merit.

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Sole Manufacturers

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Modern High Grade Fireproof

OUR OWN RAPID ELECTRIC CARRIAGES EXCLUSIVELY FOR PATRONS, operate continuously every few minutes from Hotel through Business District and to all Depots for principal trains.

EUROPEAN PLAN.

Rates $1.50 per day and upward.

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AFTER THIRTY ODD YEARS

experience, a prominent roofer of Philadelphia writes:

Gentlemen:

I have used your plates of all coatings, particularly those carrying 30 lb. and 40 lb. to the box and have absolutely no complaint whatever to make.

I have been a metal roofer for thirty odd years and still apply my roofing as I did when I first began my trade, and find the quality and durability of your plates to be equal to those of the imported plates.

The **Old Fashioned Method** of applying metal roofing, if followed at this date, would be productive of "old time" results in wearing quality. The principal causes for the condemnation of metal roofing to-day would be eliminated if metal roofs were laid on absolutely dry and seasoned boards with no cracks nor crevices through which dampness nor gases could penetrate—By the elimination of all acids as a soldering flux—By using nothing but absolutely pure metallic paint for both sides, the same to be mixed with pure linseed oil and allowed to become thoroughly dry and hard before laying the roof.

Very truly yours,

Philadelphia, Pa. JOSEPH DONNELL.

AMERICAN SHEET AND TIN PLATE COMPANY

Tin and Terne Plate

FRICK BUILDING PITTSBURGH, PA.

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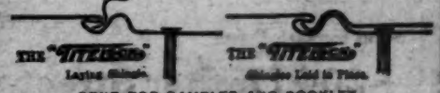
METAL SHINGLES

THE MOST PERFECT MADE

NOTE THIS ABSOLUTELY WATERTIGHT LOCK!



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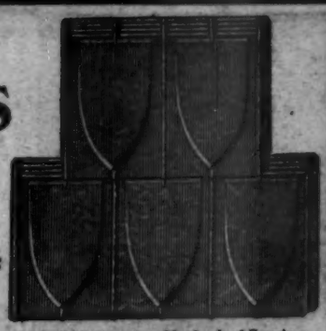

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"Invisible Joint" TRADE MARK

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MILWAUKEE CORRUGATING CO.

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Standard Metal Shingles

The Canton Ventilator

Made with Metal and Glass Tops and with and without Automatic closing device.

THE CANTON MFG. CO.
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Makers of
Cornice, Skylights, Metal Ceilings, Eaves Trough, Conductor Pipe, Etc.

Uno Revolving Ventilators

A sure cure for smoky chimneys, the best for ventilation.

4" to 30"

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"CHRISTMAS comes **but once a year,** but when it comes it brings good cheer"—to the tinner who is handling

CORTRIGHT METAL SHINGLES

The profitable jobs to look back at are always a source of satisfaction—jobs that couldn't have been handled if CORTRIGHT METAL SHINGLES didn't exist.

There's lots of them, they grow every year. Business that formerly went to the slater, the tile roofer, and the carpenter, now falls to the wide awake tinner who is handling

CORTRIGHT METAL SHINGLES.

They open a new field for you. They give you an opportunity to swell your bank account with very little work on your part, for we help you secure the jobs.

Drop us a postal stating merely that you are interested—we'll send you full information.

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PHILADELPHIA. CHICAGO.

Iwans' Volcano Revolving Chimney Top

Sizes 6 to 12 inches. Sold by jobbers of Hardware and Tinners' Supplies.

Notice one of its **Strong Features.** The upward sloping opening in back of hood creates a constant upward draft, no matter how depressing the atmosphere.

You need it for some of your customers' chimneys.

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The No. 32 Quart Size Combination Torch

is the result of over twenty years careful study, and we are able to say to you that it is, without question, the best torch ever made.

The generator produces a pure blue blast flame that is intensely hot, and uses but little gasoline.

It works fine in cold or windy weather and will save its cost the first cold snap.

No. 32 Torch, $4 Net

Jobbers supply at factory price, or we will ship direct if cash accompanies the order. Our catalog is free. It's worth dollars to you.

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Edging Machines.
Forming Machines
Capacity 30,000 feet per day of 10 hours.

Plain Round, Round Corrugated and Fluted
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GUTTER HEADERS
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The most successful machine on the market for the purpose.
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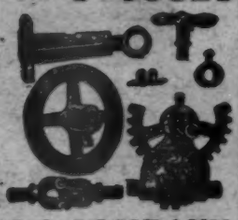

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For Standing Seams.
For Slate Roofs.
Rail can be used if desired.
Best Snow Shoe made.
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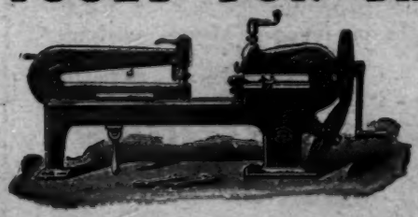

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MADE BY
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Original
Handy Tools
Modern High Standard Hand and Power Punches and Shears, Emery Grinders, Jointers and Special Machines
We also manufacture up-to-date Iron and Wood-working Machinery
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PORTABLE PUNCH No. 20
Made entirely of STEEL
Punches ¾ in. hole in ⅜ in. and equivalent
Let us send you one on trial.
Write for circular and price of this and other Marvel Punches and Shears.
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Manufacturers of
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Write: "Please stop our ad. for Tinner. The first issue brought results."

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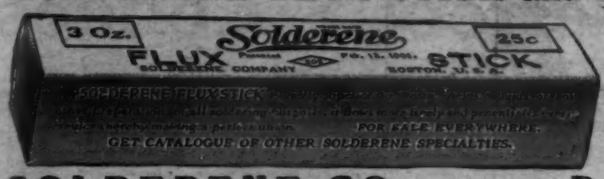

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Economical, Waterproof, Odorless, Non-Corrosive, and will not evaporate or rust.

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Always Ready—No Smoke—No Odor—No Noise—Unexcelled—Unequaled—Unrivaled—Safe—Sure—Durable.

Galvanized Iron, Brass or Copper Reservoir
Equipped with Cylindrical Slotted Burner

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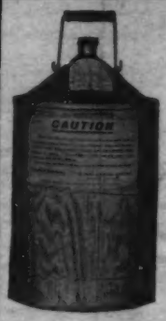

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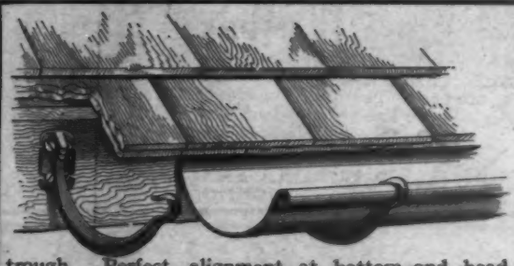

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We want every tinner to send for our free hanger offer.

We want you to try the **CENTURY** the best hanger on the market.

Easily and quickly attached to building and trough. Perfect alignment at bottom and bead. Write to-day for it

MEANS DOLLARS TO YOU.

CENTURY SPECIALTY CO., ROCHESTER, N. Y.

The "TORRID" Square Furnace

The most economical and hottest on the market.

Noiseless, odorless and smokeless in operation. Our No. 10 has the greatest range in heating of any furnace made, namely 3 to 12 pound coppers, indoors or on a roof in cold and windy weather. Order of your jobber, or we will ship direct for $6.50, on 30 days approval.

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3 Months Trial Course for $5.00

A trial will convince you that this course is just what you want. You need not sign application or bind yourself in any way.

If after taking the three months course you find it to be just what you want and wish to continue the full 25 months course then the $5.00 you have paid will be credited against the full $35.00 course and the balance $30.00 can be paid $2.00 monthly.

Cut this Ad out and enclose it with $5.00 to this school, and the three months drawings and instructions will be sent you prepaid the same day received. Drawings and instructions to be sent to,

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Address, GRAY'S SCHOOL, 1028 Jackson Ave., New York, N. Y.

The Wagner Patent Elbow and Slitting Shears

Will save time and money in making elbows and when used in connection with a cornice brake light iron can be cut any width and length. Buy a set before your competitor does. These shears are thoroughly guaranteed to give satisfaction or no sale. Made by

C. De WITT WAGNER, Cedar Rapids, Iowa

$100 IN GOLD

FOR WINDOW DISPLAYS SEE PAGE 13.

"Pittsburgh Perfect" Fences

The Only Fence of the Kind Made

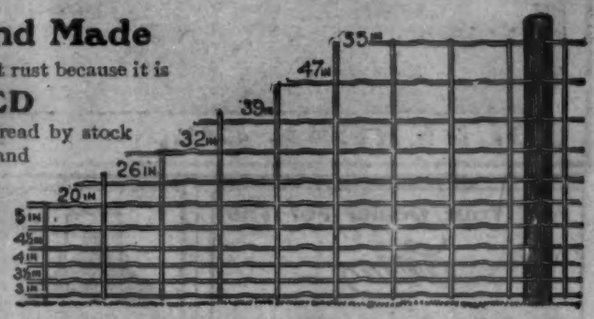
This fence has no wraps or clamps to hold moisture and cannot rust because it is

ELECTRICALLY WELDED

It is the strongest fence on the market, the stays cannot be spread by stock because where the wire is electrically welded both stay and strand become one piece of steel and the joints are given double strength. Do you want to eliminate all your fence troubles? If you do try the

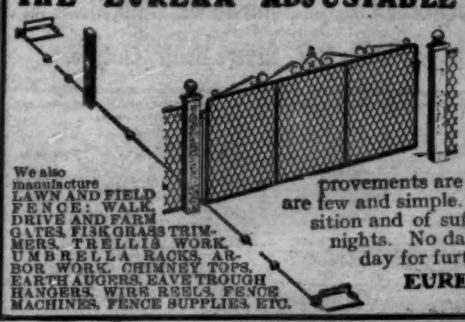
"PITTSBURGH PERFECT" FENCE

Catalog on application, write for it.



Pittsburgh Steel Co., Pittsburgh, Pa.

THE EUREKA ADJUSTABLE AUTOMATIC GATE



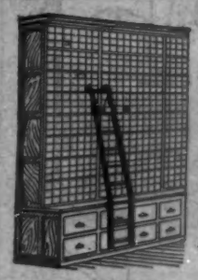
Best and cheapest on the market. Constructed of the best steel tubing and best galvanized steel wire.

IT CANNOT BE IMPROVED UPON

All the latest practical improvements are embodied. The working parts are few and simple. The **single trip** is always in position and of sufficient length to be hit on dark nights. No danger of breakage. Write us today for further particulars.

We also manufacture LAWN AND FIELD FENCE; WALK, DRIVE AND FARM GATES, FISK GRASS TRIMMERS, TRELLIS WORK, UMBRELLA RACKS, ARBOR WORK, CHIMNEY TOPS, EARTH AUGERS, EAVE TROUGH HANGERS, WIRE REELS, FENCE MACHINES, FENCE SUPPLIES, ETC.

EUREKA FENCE MFG. CO.
RICHMOND, IND.



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Are made to fit all kinds of high shelvings and are guaranteed to be satisfactory in every respect.

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We Manufacture 12 and 14 Mesh

ALUMINOID

in all widths made of 33 wire.

Heavy in 28 wire.

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Mimco Solderless Couplings

NO SOLDER (Patented) NO SOLDER

Do away entirely with wiping joints.
A Practical article and BIG SELLER.
Send for Descriptive Circular and Price List.

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Handle ours and you will be on the right side. The farmer knows about them. We have a branch at Kansas City and can ship on short notice.

"THE DENNING" CORN CRIBS AND GRAIN BINS

Will store your whole crop at a nominal cost.

"THE DENNING" FENCE

Will take care of your poultry, hogs and stock.

"THE DENNING" LAWN FENCE

Will ornament your premises.

Ask your dealer for "The Denning." Take no substitute.

THE DENNING WIRE & FENCE CO. CEDAR RAPIDS, IOWA

YALE

Rose's Finish, pat. Lock

Stove Pipe

It is made of a very high grade of uniform color Blue Polished Steel and is coated to prevent rusting. Made in all sizes. Packed twenty-five and fifty joints to crate. For sale by the jobbing Hardware Trade throughout the United States. Mfg. by

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In the event your jobber does not handle this pipe, send your inquiries to us.

WHICH CASE FOR YOU?

Are you going to do business again this winter with that old, out-of-date case, or will you jump ahead of your competitor with a bright, sales-producing new one?

THE WOLVERINE KNOCK-DOWN SHOW CASE

will make a wonderful difference in your sales, and costs only $5.00 a foot. Its beveled plate glass top, solid oak frame, and nickeled brackets and fittings place it ahead of all other knock-down cases.

Our method of shipping saves two-thirds the freight, and you can put the case up five minutes after receiving, without tools. Write today for our new illustrated catalog. Address Dept. C.

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A Full Line of Horse Nails

Send for Catalogue, Prices & Samples.

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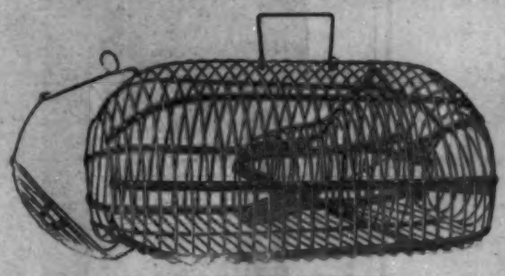
Vitreous Enameling
TECHNOLOGIST

Designs, builds and starts new plants, improves quality and reduces the costs in those already established.

The Bromwell Brush and Wire Goods Co., Cincinnati, Ohio

MAKE MORE RAT TRAPS THAN ANY OTHER MAKERS IN THE WORLD



ALL LOCKED RIBBED

Five Sizes. Steel Wire and Ribs. Patent Flange, Safety Doors. All Traps Lacquered. Rust Proof. Traps always set. Rats cannot escape when in the Trap. Strongest, best made, most saleable Traps in the market.

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Immediate Shipments,
Send for Booklet.

W. B. HELLER & CO.,
MONTPELIER,
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INTERCHANGEABLE
LOCK-CORNER
SHELF BOXES
For the Hardware Trade.
THE A. H. GREEN CO.,
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WARREN SYSTEM
SELF PAYING
HARDWARE STORE EQUIPMENT
IN INTERCHANGEABLE SECTIONS
& SCREW, BOLT & GUN CASES
J.D.WARREN MFG.CO. CHICAGO U.S.A.

HONES ARE HONES

But "APART" Hones are the Thing

For Sale by all Jobbers
S. R. DROESCHER
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THE AMERICAN ARTISAN
Keeps You Posted.

"Hard Lines"

The Trudge for Work.

He's certainly to be pitied—the *untrained* man without a job. Just one of the hopeless, struggling crowd.

Every *good* position — requiring special knowledge—is closed against him.

And there's always a line of *others* "waiting to see the foreman" or rushing to answer eht advertisement for the poorest bread-and-butter job.

Just your two hands and your shop experience would'nt carry *you* far—if slack times should come.

Let your dread for the future stimulate you to do something *now* to improve your chances. Set your mind on the better position you want—and win it.

Don't waste your time "thinking it over"—don't build air castles, just buckle down and do it.

Why not make the start today that will keep you forever out of the hand-to-mouth class? Put in part of the long Winter evenings at home, fitting yourself for a better *kind* of work and bigger pay.

We can help you. There is always a big demand for men *trained* in Sheet Metal Work. Get a thorough technical training that will fit you to hold one of these well paid positions—through our simple, practical courses of Home Study. And without loss of time in your present work.

Let the American School of Correspondence tell you how to get more pay now and insure yourself a good position all your life. We employ no agents. Like all strictly educational institutions we depend upon our usefulness for our growth.

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BB

GO TO OUR DECEMBER CATALOGUE and you will find described, illustrated and priced, not only a complete, but an exceedingly interesting line of Hardware Specials for the Holiday Trade.

Even at this late date the line is unbroken, for we foresaw the emergency that was sure to arise with the return of prosperity—and now, we have the goods.

We have the goods—the goods you must have to end the year successfully.

Go to our December Catalogue—it's your only sure late-day market. See catalogue number MC695.

B.B.

Butler Brothers

Wholesalers of good merchandise for every demand. New York, Chicago, St. Louis, Minneapolis, with complete sample houses at Baltimore, Omaha, San Francisco and Dallas.

WE SELL TO MERCHANTS ONLY

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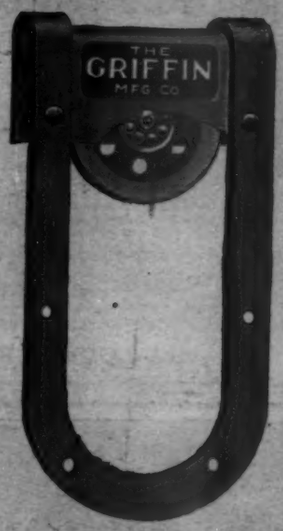

Improved Steel Door Hangers

Made Entirely of Steel
(wheels excepted)

These Hangers have hard steel Axles and Roller Bearings. Anti-Friction on any length of track.

Guaranteed to handle the heaviest doors satisfactorily.

Write for complete catalog of Hinges, Butts, Shelf Brackets, Door Bolts, etc.

THE GRIFFIN MFG. CO.
1500 Cherry St., ERIE, PA.

Why Not handle the QUEEN WASHER

It will satisfy every purchaser, make YOU a good PROFIT and increase your business. You should have the SOLE AGENCY

Not Sold to Jobbers except for specified territory.

Write For Particulars

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ELEVATORS

Improved Quick and Easy, Rising Steam, Electric and Hand Power.

SEND FOR CIRCULAR

KIMBALL BROS. CO.
1031 Ninth St., COUNCIL BLUFFS, IOWA
Kimball Elevator Co., 139 Viaduct St., Cleveland, O

"FLYER" Points of Superiority

1st. Simplest, strongest and most compact gearing.

2nd. Easiest to operate. Most approved pattern of Ball-Bearing used.

3rd. Under a load operates practically noiseless.

4th. Dasher makes nearly three quarters turn to each stroke.

5th. Tub strongest and most durable one made.

6th. Cypress wood used throughout, greatest rot resisting wood known.

7th. No bolt holes in body of tub to cause leakages.

8th. No bolts in body of tub to tear the clothes.

9th. Washes quickest and cleanest.

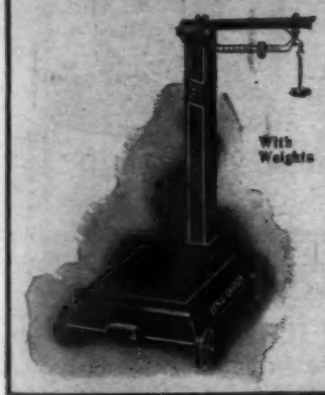
10th. Guaranteed for one year against defective material and workmanship. This protects you.

H. F. Brammer Mfg. Company

DAVENPORT, IOWA.

Headquarters of the world for Family Washing Machines

OSGOOD SCALE CO.



Binghamton, N. Y.

U. S. Standard

ALL KINDS

For Sale by all First Class Jobbers.

You Are Invited to Take Notice of the

White Lily Motor Washer

¶ It will be a valuable addition to your line. ¶ This new Water Motor Machine is of standard **White Lily Quality** throughout. ¶ The motor is small and compact, but powerful. ¶ It is of the simplest construction, there being no springs in the cylinder, and only one in the piston. ¶ Wearing parts are all brass—Tubs of selected Louisiana cypress—Stave legs—Mahogany finish.

Operates on Very Low Pressure

WHITE LILY MFG. CO.

1500 Rockingham Road, Davenport, Iowa

$100.00 In Gold For Window Displays

See page 13

LIGHTNING RODS

We manufacture Pure Copper Wire Cable Lightning Rods, made of 28, 30 and 49 Wires, with complete outfit of trimmings.

E. A. FOY & CO., Cincinnati, Ohio

Trade Supplied at Lowest Rates.
Send for Catalogue "B."

Barnett SYSTEM PROTECTS LIFE and PROPERTY

OF PURE COPPER CABLE

Lightning Rods and Fixtures

Scientifically made and GUARANTEED over 98% PURE COPPER BY TEST. Endorsed by MUTUAL and STATE-WIDE INSURANCE COMPANIES.

DEALERS: Among farmers there is a growing demand for lightning rods that have been proven reliable. Millions of feet of such rods will be erected during the next twelve months. You can't handle a more profitable line in connection with your business.

QUALITY of BARNETT RODS is guaranteed to the purchaser. We sell only thru dealers and reliable agents. NOW is the time to investigate our agency proposition for 1909. It's a money maker for the man who will put honest effort into the business.

Write at once for Catalog and Booklet explaining the BARNETT SYSTEM and prices. We want a chance to show you. Address—

JOS. BARNETT & CO.
Dept. 33 RIVERSIDE, IOWA

The human mind is so constructed that it is appreciably affected by repetition—and, after all, advertising is only repetition.—*Truman A. DeWeese.*

THE HARRINGTON AND KING PERFORATING CO.

PERFORATED METALS
OF EVERY DESCRIPTION AND FOR ALL PURPOSES
FOR SCREENS OF ALL KINDS

No. 212 NORTH UNION STREET, CHICAGO, ILL.
New York Office, 114 Liberty Street.

We have the best Pure Copper Cable

Lightning Rods

and fixtures on the market, and to prove what we say is right, we are willing to send any firm a sample outfit and they can look it over, and if it is not the best they have ever seen, and not satisfactory in every way, we want the whole shipment returned at our expense and it costs them nothing. We manufacture all our own goods and know just what they are, and we want every hardware dealer to write to us for prices and territory. We give a $500.00 guarantee and also one of our improved static machines.

WRITE TODAY TO

Maher & Son Lightning Rod Co., Preston, Iowa

FREEZERS

"LIGHTNING"

THAT EXCEL IN
Easy Running
Quick Freezing
Economy
Convenience
Practical Results

THAT ARE
Well Advertised
In Demand
Easily Sold
Satisfactory in Use
Of Known Reputation

"BLIZZARD"

THE "BEST MADE" because in practical use, they are convenient, compact in size, use smallest amount of ice and salt, run easily, freeze quickly, produce smoothly frozen creams or desserts with little bother and less work. We make also

MACHINE FREEZERS AND ICE BREAKERS

Sold by Leading Jobbers — Catalog Sent Free

NORTH BROS. MFG. CO., Philadelphia

Made in Four Sizes

1 Quart	each	$1.00
2 Quarts	each	1.25
3 Quarts	each	1.50
4 Quarts	each	1.75

Champion Triple Action Ice Cream Freezer

WHAT IT IS — The **"Champion" Freezer** is especially adapted for Household Use. Its principles of construction, beside being absolutely New, are entirely Different, Novel and Better than any of the new style of household freezers placed on the market during the past few seasons. Besides being better, you can guarantee the **"Champion"** to your customers as being durable.

WHAT IT IS CONSTRUCTED OF — The Outside Tub is made of best galvanized iron. The dasher is made of malleable iron, heavily tinned, with a Wood Scraper, which prevents the cream from adhering to the sides of the freezing can while in process of freezing. The Cylinder or Freezing Can is made from block tin (re-tinned.)

WHAT IT WILL DO — We know that if you sell freezers, and wish to handle one that will give your trade satisfaction, and do all that the manufacturers claim it will do; that you can sell at about one-half the price of any of the old style freezers (besides giving you a liberal profit) and a freezer that will make the finest Ice Cream, Sherbets and Frozen Desserts in a few minutes, our **"Champion" Freezer** is the one for you to handle.

17-19 Ninth St. REID-EDELMUTH MFG. CO. Brooklyn, N. Y.
Chambers & Hudson Sts., New York, N. Y.

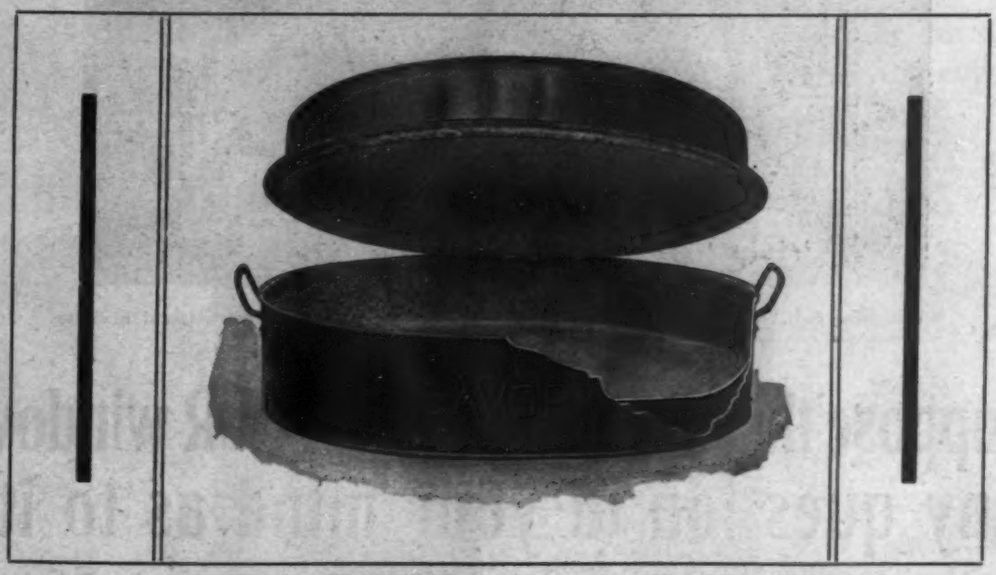
THE

SAVORY ROASTER

IS A

Good Christmas Seller

AS WELL AS AT THANKSGIVING



Keep SAVORY ROASTERS on display till Christmas.

The Savory Roaster Makes a Good Common-Sense Christmas Present

There is no reason why SAVORY ROASTER buying should stop with Thanksgiving. It will be a fine seller for you right on up to Christmas if you keep it up in front where the women can see it.

The sales of SAVORY ROASTERS this year are unprecedented. This Roaster has such great merit that the sale of one of them to a woman frequently results in several others buying Roasters. The SAVORY ROASTER is one of the best Self-Advertisers on the market.

Don't Fail to Replenish Your Stock for the Christmas Trade

THE REPUBLIC METALWARE CO.

BUFFALO :: CHICAGO :: NEW YORK

Window display by H. W. Dieterle for Murphy-Maclay Hdw. Co., Great Falls, Montana—the general idea of the display being to represent a corner in a metal-ware factory at the noon-hour.

Suppose this display were in YOUR window Any question in your mind as to its Attracting Attention?

Have you decided what kind of a window display you are going to make for the Holidays? It will have to be something unusual to attract attention alongside of the Santa Claus and Christmas Tree windows that will be shown on your street.

With Brother Bill (an actual *life size* lithographed cut out) you can make window displays that are both *unusual* and *attractive* and at practically no expense.

Let us tell you how to get a Brother Bill cut out.

The Pritchard-Strong Co.

25 Circle Street :: :: Rochester, N. Y.

ATLANTIC Wash Boilers

The very best Boilers on the market

¶ Made from fourteen inch full weight sheets; standard in length and circumference.

¶ The wide seams which we are introducing on all **Atlantic Boilers** make them much stiffer and stronger on the ends where the lifting strain comes.

A SPECIAL FEATURE

All **Atlantic Boilers** are fitted with

ONE-PIECE COVERS

Absolutely seamless and far superior to anything ever before produced. They are light, strong and always fit perfectly.

¶ Every **Atlantic Boiler** is tested in a hot water tank under pressure and every boiler is **guaranteed against leaks.**

¶ Write for new catalog describing further our perfect boilers and other high grade Tin, Copper and Galvanized Ware.

Atlantic Stamping Company

ROCHESTER, N. Y.

"Enterprise" "Enterprise"

FOOD CHOPPERS MEAT CHOPPERS

SAUSAGE STUFFERS AND LARD PRESSES

The Best Made

The Best Liked

The Best Known

The Best Advertised

The above picture shows the graceful lines and strong simplicity of the "Enterprise" Food Chopper. A necessity in every kitchen because of its usefulness. An easy seller, because of its strong selling points—Perfect cutting mechanism. A tight true feed screw. Double tinned. Four knives with each machine.

DRIVE THESE TANDEM!

Every user of an **"Enterprise" Sausage Stuffer and Lard Press** needs an **"Enterprise" Meat Chopper.** Sell them together. Push them together. Drive them "tandem."

Every dealer, and almost every buyer, knows the superiority of genuine **"Enterprise" Choppers.**

Lest you forget, we remind you of these points about the **"Enterprise" Sausage Stuffer and Lard Press.**

Accurately-bored cylinder. Lips on the inner tin cylinder to make easy its handling when heated. No hot iron cylinder to handle when pressing lard. A patent latch which prevents breaking of plates. Patent corrugated spout prevents air entering the casing, thus assuring preservation of sausage.

Write for catalogue describing, illustrating and listing these and other "Enterprise" specialties. Get our advertising aids for dealers.

The Enterprise Mfg. Co. of Pa.

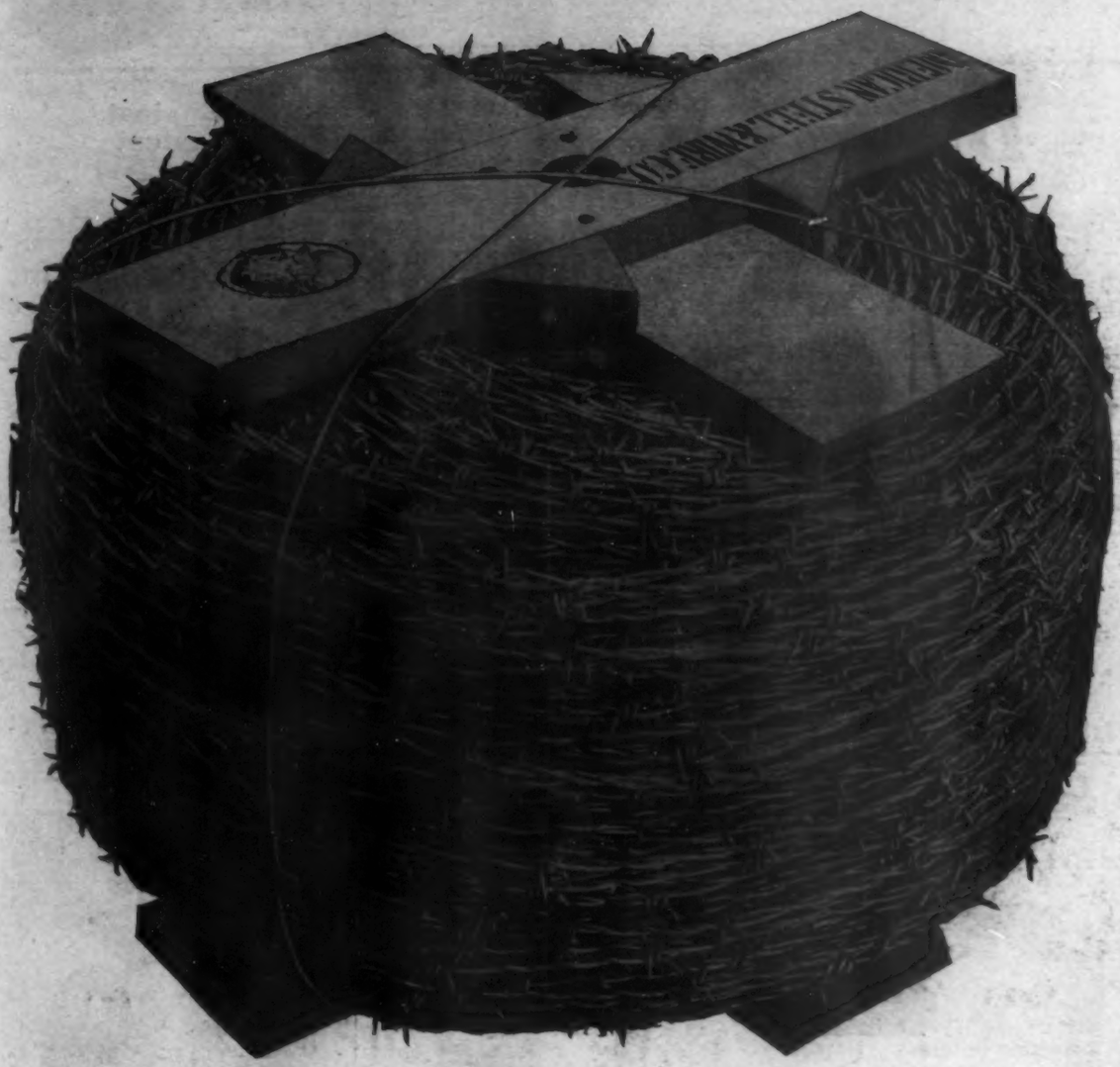
PHILADELPHIA, U. S. A.

21 Murray St., New York.

438 Market St., San Francisco, Cal.

American Steel & Wire Co.

Chicago New York Denver San Francisco



Makers of the following old-established brands of American Barbed Wire:

Joliet Glidden	Waukegan 2 and 4-point
Ellwood Glidden	Lyman 4-point
Baker Perfect	American Special

LUFKIN Measuring Tapes

are made in every conceivable variety, to suit every purse and purpose, but all of the same superior quality.

¶ Our extensive advertising creates a demand, that every progressive dealer should be able to satisfy.

¶ It takes but a minute and a postal to ask for our catalog—it's more than worth while.

Please Mention The American Artisan

THE LUFKIN RULE CO. Saginaw, Mich., U. S. A.

New York London, Eng. Windsor, Ont.

DISSTON SAWS

Run Easiest
Cut Fastest
Last Longest

To the practical Saw User this tells the full story of HIGHEST PERFECTION in Material, Temper, Design and Workmanship attained for the DISSTON BRAND OF SAWS.

HENRY DISSTON & SONS, Inc.

Keystone Saw, Tool, Steel and File Works

PHILADELPHIA, PA.

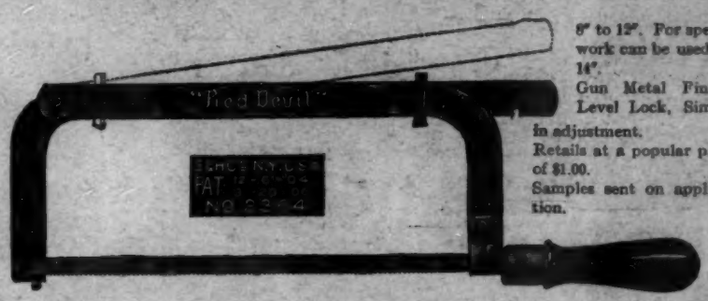
A NEW PATTERN STANDARD LEVEL—Two Level Glasses, One Plumb Glass

Side glasses may be reversed at any time; all easily adjustable; all glasses in plain view from both sides; brass trimmings on both sides.

No. 31—Solid Cherry.
No. 32—Three-piece Cherry.
No. 33—Solid Mahogany

THE BAKER-McMILLEN COMPANY, Akron, Ohio

Genuine "RED DEVIL" Hack Saw Frame



8" to 12". For special work can be used on 14".
Gun Metal Finish, Level Lock, Simple in adjustment.
Retails at a popular price of $1.00.
Samples sent on application.

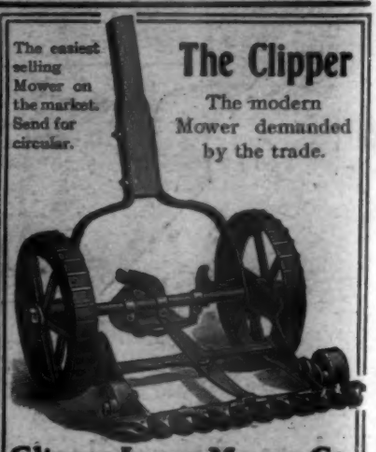
Order through your jobber or direct from us. Insist upon the Genuine "RED DEVIL"

SMITH & HEMENWAY CO., 108-110 Duane Street, New York City

The Clipper

The easiest selling Mower on the market. Send for circular.

The modern Mower demanded by the trade.



Clipper Lawn Mower Co.
DIXON, ILL.
Manufacturer of Hand and Pony Mowers and Marine Gasoline Engines

Drink Pure Water

The No. 50 Star Pump shown here will positively purify the water in any well or cistern in a short time.

This purifying feature alone makes it the only pump fit to put in any well where the water is used for household purposes, for it will surely save its cost in the Doctor's bill many times over.

As it is made of No. 24 gauge galvanized iron it is a very substantial and handsome outfit, and will last for years.

Our line of purifying pumps is very complete. So is our line of Galvanised Chain Pump Curbs and Tubing.

Ask your jobber for Star Pumps.

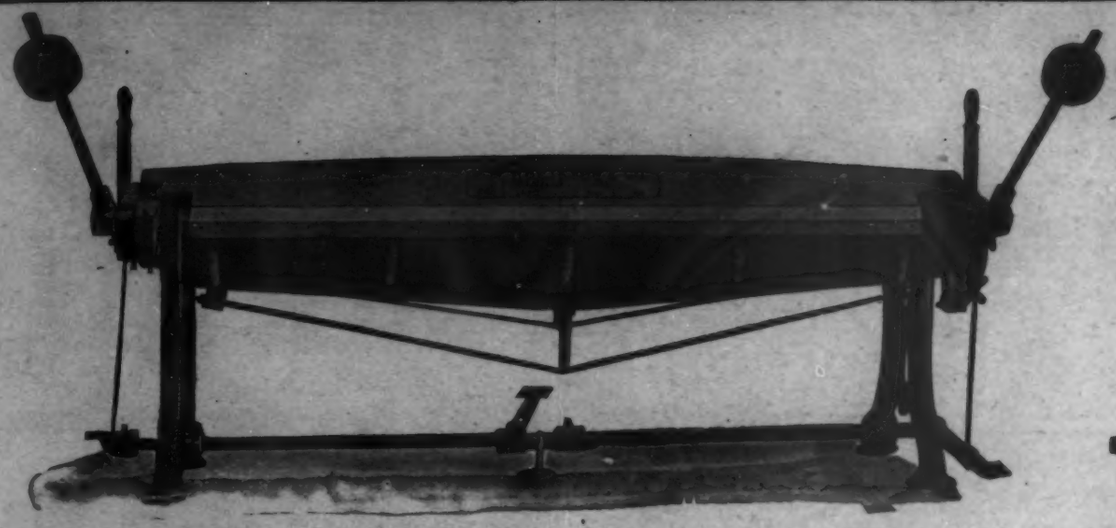
STAR BUCKET PUMP CO.
ST. LOUIS, MO.

Empire Door Holder

Improved

50 per cent greater pressure on the floor than any other. Easy to apply. Easy to operate.

CALDWELL MFG. COMPANY
41 Jones St., Rochester, N. Y.



The above cut shows the general design of our Cornice Brake. These Machines are guaranteed for No 20 Gauge material and lighter, and with Heavy Bending Attachment for No. 18 Gauge. With each brake is furnished 2½-inch, 2-inch, 1½-inch and 1¼-inch wood formers, and 1-inch, ⅞-inch and ¾-inch iron forms, also friction clamps for holding same. All machines are fitted with foot treadles, quadrant gauge and three quadrant stops.

WRITE FOR CIRCULAR.

The J. M. Robinson Mfg. Co.

SHEET METAL WORKING MACHINERY

Spring Grove Avenue **Cincinnati, Ohio**

RATCHET HANDLE

WITH SOCKET WRENCHES

No. 107

This combination will prove an excellent seller as it enables a mechanic to turn screws and nuts with heads from 9-32 to 9-16 inch.

The tool is adjustable for use either right or left hand, and the Handle gives an 8-inch leverage. The Head is ball-bearing.

The Nut Wrenches are of malleable iron with polished faces. They are excellent for turning bolts or lag screws.

GOODELL-PRATT COMPANY

Toolsmiths

GREENFIELD, MASS., U. S. A.

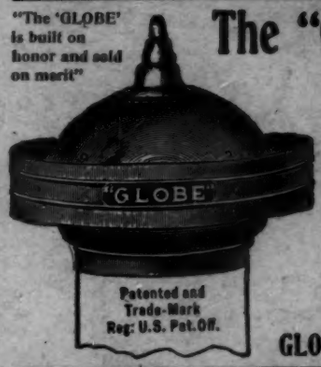
ONE COPY RECEIVED DEC 7 1909

THE IMPROVED ONE-PIECE MITER

This miter is made absolutely correct, true to shape, size and bead, and the easiest connecting slip joint. Will save your time and temper. In case your supply house cannot furnish them, send your order direct to the

J. E. WHITACRE MFG. CO.
ROCKFORD, ILL.
Manufacturers of Sheet Metal Specialties.

"The 'GLOBE' is built on honor and sold on merit"



The "GLOBE" Ventilator

in COPPER, GALVANIZED IRON and with Glass Tops for Skylight purposes.

ABSOLUTELY STORM PROOF
For Perfectly Ventilating Schools, Churches, Halls, Mills, Factory and Audience Rooms of Every Character
SMOKY CHIMNEYS CURED
"GLOBE VENTILATED RIDGING"
Send for Pamphlet
MANUFACTURED BY
GLOBE VENTILATOR CO., Troy, N. Y.

The ECLIPSE Nested Stove Pipe Thimble

Saves 80 per cent of room.
Stronger than a hand-made riveted thimble.
Always Ready to hook together.
The Lug is always on top and passes through two slots then tied. Does not interfere with the entering stove pipe.

The ECLIPSE Nested Stove Pipe Thimble is made of Galvanized Iron in sizes of 5, 6 and 7 inch.
Manufacturers of Pieced Tinware and all Styles of Flour Sifters.
STUBER & KUCK, Peoria, Ill.

THE JOB HUNTS THE MAN

who uses

SCOTT'S EXTRA COATED

HAMMERED OPEN HEARTH

ROOFING TIN

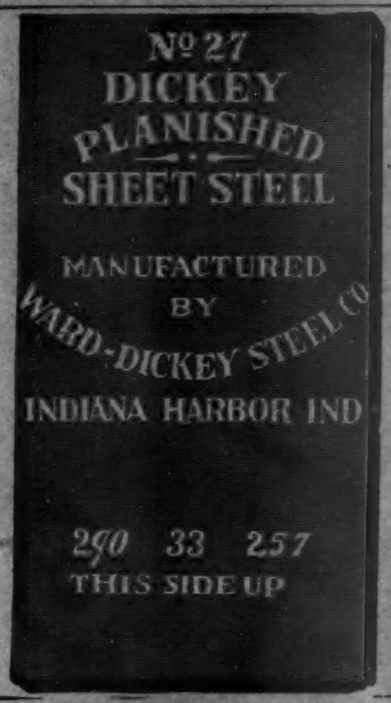
Made by

FOLLANSBEE BROTHERS CO.

PITTSBURGH

BRANCHES:
Louisville, Milwaukee, Memphis, Rochester, Detroit, New York, Chicago, Indianapolis, Cleveland, Nashville, Buffalo, Norfolk
care of Stockhoff Supply Co., St. Louis.

Tinners' Supplies of Every Description kept in stock.



GENUINE HAMMER PLANISHED SHEETS

"Planished Sheets"

means **Hammer Finished** sheets.
Do not accept Roll finished substitutes when ordering
"PLANISHED."
Insist upon the genuine articles in sheets, pipe, elbows and like goods.

A FAST SELLING ITEM

and one which leaves the dealer a good profit is our

BERLIN KETTLE

Made with tin or enameled cover.
Our line consists of over 500 fast selling items.

Like all our goods it is strictly first class and sells at a reasonable price.

WRITE FOR CATALOG.
Star ★ Enameling & Stamping Co., PITTSBURGH, PA.

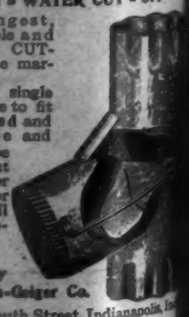
Trying to do business without advertising is like winking at a girl in the dark; you know what you are doing, but nobody else does.

The W. J. BURTON Co.

DETROIT, MICH.
Manufacturers of
Fireproof Metal Windows
"Glazed with Wire Glass"
Made either Stationary, Pivoted or Sliding Sash.
Architectural Sheet Metal Work of All Kinds
in Ornamental and Fireproof Construction. Write for illustrated catalogue.

THE "CENTENNIAL"

RAIN - WATER CUT - OFF



The strongest, most durable and cheapest CUT-OFF on the market.
The only single cut-off made to fit Corrugated and plain pipe and which can be used without extra pipe or elbows. For sale by all leading jobbers.
Manufactured only by
The Sullivan-Geiger Co.
19 & 21 E. South Street, Indianapolis, Ind.